

AMERICAN

AUGUST • 1955

Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY



This Issue . . .

- The New Yorker Photo Company
- Blowing Gaskets For Cinematographers
- Set Lighting For Commercial Films

25c

FOREIGN 30c



EASY

DOES IT!

with the new

HOUSTON FEARLESS LABMASTER

16mm Film Processor

EASY TO OPERATE

Never was there a film processor as easy to use as the Houston Fearless Labmaster! Fully automatic. Daylight operating. All controls grouped for maximum convenience. For 16mm blow negative or positive film. Easily converted for reversal film or color. Famous Houston Fearless quality, produces consistently finer results.

EASY TO SERVICE

All parts of the Labmaster are easily accessible for routine servicing and maintenance.

EASY TO OWN

Priced far lower than any comparable machine! Price includes built-in air compressor, recirculation pump, loading elevator, temperature control, speed control . . . everything complete to plug in and operate. In comparing values, be sure to add the cost of all necessary extras to the price of other makes!

COMPARE

THESE FEATURES AND TOTAL COST WITH EVERY OTHER PROCESSOR!

- Completely self-contained no added accessories necessary to operate
- Highest speed consistent with quality work. Variable control.
- Change magazines without stopping machine.
- Exclusive Houston Fearless Clutch Drive eliminates film breakage.
- Conversion for reversal or color film.
- Temperature control on developer and fixer.
- Recirculation on developer.
- Ventur-type air squeegee. Highly effective.
- Built-in compressor for air squeegee.
- Filtered, forced air, infrared heat on dry box.
- Hot air exhaust provided on dry box.
- Bottom drain on each solution tank.
- All parts easily accessible for service.
- Compact, "inline" design.
- Priced far lower.

NEW! EASY FINANCE PLAN

Let your new equipment pay for itself from savings it will earn. Small initial payment. Balance up to 5 years. Low interest. Write for details.



HOUSTON FEARLESS COMPANY, INC., 1920 W. EIGHTH STREET, LOS ANGELES 44, CALIF.

HOUSTON FEARLESS MANUFACTURED BY U.S. FILM PROCESSING AND RESEARCH COMPANY

11801 W. OLYMPIC BLVD., LOS ANGELES 24, CALIF. • 401 FIFTH AVE., NEW YORK 20, N. Y.

Houston Fearless Co., 1920 W. Eighth Blvd., Los Angeles 44, Cal.
(Send complete details to:) Labmaster Sales Processor
Jimm L. Shaw C. Hale C. Grier C. Higgins C. Pearson
Rever C. Higgins-Pearson C. Probert C. Dean Teram
Carmel Dallas C. English C. Moore C. TV Poterba

Name Title
Firm
Address
City State

1

**PERMALOCK MIRROR
GUARANTEES POSITIVE
MIRROR ALIGNMENT**

Only a PermaLock snaps into position and stays in position. This ensures positive mirror alignment, perfect focus after every globe removal. Even a severe jolt can't dislodge mirror.



only

J.G. McAlister spots

combine all 3

2

**LIFETIME BEAM PILOTS
GUARANTEE FLARE-FREE
SPILL-PROOF LIGHTING**

Excluding every framed lens-zone are special, opaque bands, fused to the glass. These Beam Pilots prevent flare and spill-light by controlling side-beam deflection, and without losing useful light.



3

**DUAL CONTROL FOCUSES
BOTH FRONT AND REAR**

New dual-focus control is twice as convenient, twice as accurate as unsteady, old-fashioned one lever focusing. Even Action focus is always smooth, absolutely precise and accurate from spot to flood positions.



TODAY, WRITE FOR COLUMBIA NEW
CATALOG-BROCHURE "NEW DIMENSIONS IN
CONTROLLED STUDIO LIGHTING"

we're headquarters for the finest engineered lighting & production equipment sales and rentals

J.G. McAlister Inc.

1117 North McCadden Place
Hollywood 38, California

to you . . .

whose
intelligent
demand
has
helped

US

create

quality

. . . our

sincere
gratitude
and
appreciation

CONSOLIDATED
FILM
INDUSTRIES

659 Seward St., Hollywood 18, Calif.
1740 Broadway, New York 19, N. Y.



AMERICAN

Cinematographer

THE MAGAZINE OF MOTION PICTURE PHOTOGRAPHY
PUBLICATION OF THE AMERICAN SOCIETY OF CINEMATOGRAPHERS

ARTHUR E. GAVIS, Editor

MARGA HUTCHINS, Editorial Assistant

EDDIE BENT, Technical Editor

EDITORIAL ADVISORY BOARD: John Arnold, Arthur Edson, Lee Garmes, Charles
Busby, Liza Shannup, Fred Guze, Clara E. Kendrick

Editorial and Business Office: 1782 N. Orange St., Hollywood 28, Calif.
Telephone: HOLlywood 7-2135

VOL. 36

AUGUST • 1955

NO. 8

In This Issue

ARTICLES

MAGNETIC SOUNDING: EDUCATIONAL CONTENT	452
THE FILING OF "FIDELER'S FLAME"—By George Folsey, A.S.C.	460
MOVIES IN LAW ENFORCEMENT—By R. Monroe Schiller	463
THE NEW YELLOW FLAME CAMEL—By Charles Mendley	464
SET LOCATING FOR COMMERCIAL FILMS—By Charles Laing	467
GULF VIDEOS—CRYSTAL NOTES TO BILLYWAGNER NEWSREELS—By Charles S. Paden	471
SHOOTING THE ENTIRE PICTURE IN LOCATION—By Frank Daugherty	474
SHOOTING CAMERAS FOR CINEGRAMS—By Leigh Allen	476
KODAK BULBS: DIVERSITY AND EXISTENCE CONTINUED	490

AMATEUR CINEMATOGRAPHY

SIX SOMETHING BETTER WITH SOUND—By Harold Bennett	478
A COUPLED RANCE FEELS FOR CINE CAMERAS—By Allen B. Roe	481

FEATURES

INDUSTRY NEWS	445
WHAT'S NEW IN EQUIPMENT, ACCESSORIES, SERVICE	450
BULLETIN BOARD	458
HOLLYWOOD STUDIO PRODUCTIONS	494

ON THE COVER

BRYNA PRODUCTIONS cover showing a scene for "The Indian Fighter," starring Kirk Douglas, on location at Bend, Oregon. Director of photography is Wilfred Cline, ASC. Note use of both house lights and sunlight reflection to provide fill light in the scene. Study on the photography of the picture appears elsewhere in this issue—Photo by Anthony Upton

AMERICAN CINEMATOGRAPHER, established 1920, is published monthly by the A. S. C. Agency, Inc., 1722 N. Orange St., Hollywood 28, Calif. Entered as second class matter May 21, 1937, in the post office at Los Angeles, Calif., under no. 41, 1975. SUBSCRIPTIONS: United States and Canada, \$1.00 per year; Foreign, including Pan-American Union, \$1.50 per year. Single copies, 25 cents; back numbers, 50 cents. Savings: single copies, 31 cents; back numbers, 41 cents. Advertising rates on application. Copyright 1955 by A. S. C. Agency, Inc.

the

and only...

Mitchell

Professional Equipment for Professional Results

World's Finest

35mm. and 25mm. Cameras!

For over 25 years, Mitchell Cameras have set professional photographic standards for the Motion Picture Industry. These flawlessly designed, ruggedly constructed cameras have proven themselves in smooth, positive operation under the most exacting conditions. Today, as yesterday, the World's greatest films depend upon Mitchell—professional equipment for truly professional results.



35mm. Professional

The 35mm Professional has the same proven Mitchell 25mm. features—in being 25mm. capable in 35mm. service. Equipped with 35mm. Mitchell film, this camera is a favorite of leading commercial producers for sound photography.



25mm. 800 Model

The Mitchell 25mm. Camera—standard equipment of major studios—is internationally known for dependability and performance. For superb photography, Mitchell 25's are available in BNC (Bing) construction, NC and 16-Speed models in most every refinement.

Mitchell Camera CORPORATION

666 West Harvard Street • Glendale 4, Calif. • Cable Address: "MITCAMCO"



85% of the professional motion pictures shown throughout the world are filmed with a Mitchell

35mm Holmes Projector

\$114.50



Just Released—

U. S. Navy Surplus

35mm Eyemo Lenses

8" Eyemo Prod. Inc. P4.5	\$ 22.50
1" Bellco Prod. Inc. P2.2	175.00
1" Kuper Inc. P2.2	99.50
2" Eyemo Prod. Inc. P2.8	57.50
2" Kuper Inc. P2.8	57.50
4" DP P.D. Products P2.8	129.50

16mm Projection Lenses

2" Bell & Howell Cat. Reg. 332.95	39.95
4" Bell & Howell Cat. Reg. 332.95	9.95

LIGHT STANDS

Bordwell & McAlister



\$10.95

SEMLER INDUSTRIES, INC.

4015 LAMBERTSON BOULEVARD
NORTH HOLLYWOOD, CALIFORNIA

INDUSTRY NEWS

In the race to be the first to put in video-film cameras into practical use, the Allen B. DuMont Laboratories appear to be the winner. Beginning August 16th, DuMont's broadcast division will start production on the first of 39 half-hour TV film shows for Jackie Gleason, using an Electronic System, which was described in the May, 1955, issue of American Cinematographer.

To be shot in 35mm, each film will be a half-hour version of "The Honeymooners" which heretofore was telecast live from New York. New Gleason sponsor for 1955 is Buick.

Filming will take place at the Adelphi Theater in New York, which is being revamped for the purpose by DuMont.

Technical Motion Picture Corporation last month took title to the buildings and grounds in Burbank, California, formerly owned by Color Corporation of America. Technicolor will utilize the former Cinecolor plant for its research staff and laboratories after remodeling is completed.

DuPont's remarkable new "Cronar" polyester photographic film base will be described in a special report to be given at the National Photographic conference to be held in Chicago in conjunction with the Photographers' Association of America annual convention, August 15 to 19.

Report will also include information about the experimental use for cine film of a "Cronar" base only 2½ mils thick. Conventional cine film base is 5 mils thick.

Produced in experimental quantities for approximately three years, "Cronar" polyester photographic film base is expected to be in production at a full-scale plant at Paris, New Jersey early this fall.

DuPont's graphic arts films, and then those for cine use, will be the first products to be converted to the new base.

Closed circuit television facilities recently installed at Consolidated Film Industries' Hollywood laboratory will now accommodate 35mm film in addition to 16mm. Existing 16mm closed circuit video units have been augmented by the installation of equipment for the new 35mm film chain.

New facilities will now afford TV producers, film editors, cameramen and other clients of Consolidated to view TV film release prints on closed circuit TV

to pre-determine how films will look on home television screens.

A new sales office to serve the Western states has been opened at 6311 Hollywood Blvd., Hollywood, by S.O.S. Cinema Supply Corp., of New York.

Headling up S.O.S.'s west coast office staff is Alan C. Macaulay who has been named Executive Western Representative for S.O.S. by Joseph H. Tancry, president of the company.

Macaulay was formerly associated with several film production companies and has had many years practical production experience.

Marking their fourth expansion move in as many years, Florman & Babl, motion picture equipment manufacturers and distributors, last month moved to new and larger quarters at 70 West 45th Street, New York 36, N. Y.

New quarters includes a spacious showroom 100 by 20 feet plus a large mezzanine floor all of which, according to Florman & Babl, gives the company the largest street-level showroom for exclusive motion picture equipment in New York. In addition new quarters provide expanded rental facilities; new, fully-equipped machine shop for repair, servicing and manufacturing; new credit facilities for purchase of new or used equipment; and greatly increased stock of all motion picture equipment items.

A historical survey of the development of practical motion picture photography and projection, titled "Origins of the Motion Picture" is among the most recent film productions of the U. S. Naval Photographic center at Washington, D. C.

Produced to meet instructional needs of the Naval Photographic School at Pensacola, Florida, the 20-minute film also provides professionals in the industry with background information on man's search for ways to portray scenes, from the cave drawings of Altamira, Spain, to Edison's Vitascope.

The story is told by means of still photographs, original art work, stock motion picture footage, some of it re-produced from paper film, and live photography.

The film, which will be released in mid-summer to Navy film libraries throughout the country, has already been selected for showing at the next Edinburgh and Venice Film Festivals.

SALES • SERVICE • RENTALS



THE WORLD'S MOST COMPLETE ASSORTMENT
OF PHOTOGRAPHIC EQUIPMENT FOR

T.V. and Motion Picture Studios

New PROFESSIONAL JUNIOR

Adjustable wood BARY TRIPOD

—for Prof. Jr. friction
and geared heads



For substantial steel and steel

Removes from floor to stage

23" extended — 19" collapsed

\$75

FAMOUS
"controlled
action"

SMALL GYRO
TRIPOD

Two speeds—fast and fast
—for both panning and tilting
Bates you require fine steady views
and fast-moving sports events. Espe-
cially recommended for Varco Model,
Tama Model, B & H E-type
and similar cameras.

\$600

PACKAGED LIGHTING WITH COLOR-TRAN

—studio lighting in a suitcase



Impulse lamp with its own two 2000 watt units
on a 30 amp. base — COLOR-TRAN will do 10
00 watts in 2 light heads, 2 Superior stands and
proper size COLOR-TRAN connector to match.
Packed in compact case.

Write for COLOR-TRAN Catalogue.

Senior Kit
\$237.50

Other style
also available.



STOP MOTION MOTOR FOR CINE KODAK SPECIAL

Just forward or reverse, 1/8
AC synchronous motor with frame
mounts. May be run continuously
or for single frames. Camera
mounts without special tools.

\$550

Also available — Stop Motion
Motors for 16mm-35mm B & H,
Mitchell and other professional
cameras.



ELECTRIC FOOTAGE TIMER

Dual model for both 14mm
and 16mm. Large white ap-
erents on black background. Accu-
rate read out. Switch controlled
by sprocket, also remote other
14mm operating at 34 feet per
minute—or 11mm operating at
70 feet per minute... or both
in synchronization.

\$95

Single model, either 14mm or
16mm

\$45

preste-splicer

GIVES PERMANENT SPICE
IN 10 SECONDS!



Especially good for splicing magnetic
film. But Model type for non-perforated
or perforated film. 14mm, 16mm or
70mm.

\$547.80

14mm or 16mm models—
for perforated film.



GRISWOLD HOT FILM SPLICER

Model 9-2 for 16mm sheet and sound
film. Precision construction makes it easy
to get a clean, square splice with accu-
rate hole spacing. Nothing to get out of
order.

\$65

Also Bell & Howell 8mm, 16mm and
35mm Hot Splicers and B & H Labors-
tory model Hot Splicers.

*9.5mm Lenses in 14mm C mount 18.5mm (extreme wide angle-flat field)
Lenses available in mounts for all 35mm Motion Picture Cameras.
*PHOTO RESEARCH Color Temperature Meters *Electric Footage Timers
*Neumade and Hollywood Film Company cutting room equipment.
*Griswold & B & H. Hot Splicers. *DOLBY—Bendwell-McAlister. Male
Richardson, Century and Colortran Lighting Equipment.

FRANK C. ZUCKER
CAMERA EQUIPMENT CO.
1600 SPRINGFIELD ROAD, NEW YORK CITY



need location lighting... fast?

Call on Jack Frost, one of the nation's largest suppliers of temporary lighting facilities.

Wherever you are, whatever your lighting needs, you can depend on Jack Frost's expert handling and complete range of equipment, from a 100 watt inkie to 225 amp arc with mobile power plants. In the studio too, we can supplement your present equipment to meet any situation, anywhere. We've been doing it for years for many of the top shows.

Our service includes complete installation and removal at one low cost.

free estimates

Write or wire for a free estimate and a Free Catalog of Equipment.

JACK A. FROST

Dep't. AWC1

234 Piquette Ave., Detroit 2, Michigan
425 Bancroft Road, Toronto 18, Ontario



- 1 Take up reels
- 2 Feed reels
- 3 Splicing elevator (40 seconds capacity)
- 4 Exhaust fan motor (1800 rpm)
- 5 Feed bottles with bottom screw vents
- 6 Drying air thermometer
- 7 Microwater stripe adjustment
- 8 Removable microscopes
- 9 Sapphire shoes beneath precision stripping heads
- 10 Splicing block
- 11 Air heaters
- 12 295' leader
- 13 High temperature drying chamber (4 minutes)
- 14 Removable partition facilitates threading
- 15 Low temperature drying chamber (2 minutes)
- 16 Threading glass door

How the New 35-mm Magna-Striper works: Soundcraft's Magnetic Oxide is then applied to each different surface.

35-MM. MAGNA-STRIPS for double-perforated film
16-MM. MAGNA-STRIPS for both magnetic and photographic sound
100-MM. MAGNA-STRIPS for cinematograph sound

NOW! "Oscar" Winning SOUNDCRAFT Magna-Striper® Available in New 16-mm Model!

HERE AT LAST is the answer to the demand for local striping service to provide true hi-fidelity 16-mm magnetic sound

...an entirely self-contained, semi-portable, one-man operated magnetic oxide striping machine, identical in every vital feature to the now famous 35-mm Soundcraft Magna-Striper which won the coveted 1953 Academy of Motion Picture Arts and Sciences Award.

...the same fine Soundcraft engineering and construction that

every major Hollywood producer of CinemaScope has used to process stereophonic sound release prints.

With ease and precision this new equipment quickly applies two stripes of Soundcraft's perfected magnetic oxide to any 16-mm film... black and white or color, single or double perforation. Jeweled bearing shoes (Item 9 above) assure precision striping even with old, warped or distorted film... even when spliced and spliced and spliced! All wiring is explosion proof.

Write today for complete franchise information and full technical details about how you, too, can build a highly profitable business with this revolutionary new Model Z 16-mm Soundcraft Magna-Striper!

For Every Sound Reason

**REEVES
SOUNDCRAFT
CORP.**

Dept. AE 8

10 East 52nd St., New York 22, N. Y.

A Collector's Item!

CINEMATOGRAPHIC ANNUAL

PUBLISHED in 1930, a limited number of the original editions of this valuable technical book are available to cinematographers, movie amateurs, schools and public libraries.

600 PAGES OF TECHNICAL ARTICLES

written by some of the highest paid technical talent in the motion picture industry.

No other book ever written contains so much data supplied by the professionals of Hollywood's motion picture studios.

Optical Science of Cinematography, Composition in Motion Pictures, by Dan Clark, A.S.C. Printing With Light by Victor Miller, A.S.C. Light Filters in Cinematography, by Ned Van Buren, A.S.C. Art in Makeup, by Max Factor, Motion Picture Studio Lighting, Sound Recording, Microcinematographic Apparatus, Unlabeled Facts and Formulas—these are but a few of the subjects covered in this book.

A MUST FOR YOUR LIBRARY OF TECHNICAL BOOKS

Printed on fine coated paper containing hundreds of photographic illustrations and bound in blue leatherette. This book could not be produced today for only where now the original price asked.

\$1.00

Postpaid

MAIL THIS COUPON TODAY!

American Society of Cinematographers
1732 No. Orange St.
Hollywood 28, Cal.

Enclosed please find \$1.00 for which please send me in copy of the CINEMATOGRAPHIC ANNUAL.

Name _____

Address _____

City _____

State _____

WHAT'S NEW

... in equipment, accessories, service



Printer Cue Unit

Arson Research Co., 4337 Clybourne, No. Hollywood Calif., announces the new Dunning Magic Dot light change activator for B & H model H and J film printers. Device, which applies metallic dot to edge of film, eliminates old notching method. Magic dots activate printer light change by electrical contact.



Dual Reader

The Camera Mart, 1845 Bway, N. Y. City, offers a Dual Reader for 16mm film editing. Device consists of optical sound reproduction unit that will read either variable area or density tracks, a 4-watt amplifier with speaker, and a base plate to which any 16mm viewer may be added. Operates on 110-120-V, 50 cps. A.C. Price is \$195.00. Literature is available.

Film Processors

Millford Film Machine, Millford, Conn., announces a new, economical and low-priced 16mm film processing machine for daylight operation. Features include

automatic operation, slip-clutch film drive, quality control Compur, portable unit sells for \$1000 up, depending upon accessories desired. Literature is available.

Avicon Converters

Harold's Photography & TV, 308 So. Philips Ave., South Falls, N. D., is marketing a 900-lb. magazine conversion for the Avicon CineVoice and Pro cameras. Adaptation incorporates unique ball-bearing drive. Rolling footage indi-



cator shows amount of film used. Bath in camera phase-jack affords closer monitoring of sound. Conversion permits camera to take 100, 200 or 400 foot rolls of film.

Camera Rackover

Leas Products Co., P.O. Box 133, Wapakoneta, Ohio, announces a precision rackover device for Bell & Howell "70" cameras. Mounts on any standard tripod. May be used with all camera accessories in place. Other models also available for Bales, H-8 and H-16 cameras. List price is \$29.50.

Photo Research Moves

Photo Research Corporation moved from Burbank to new quarters at 137 No. Cahuenga Blvd., Hollywood, last month.

(Continued on Page 48)

The One-Stop Source Of Supply

S.O.S. Has YOUR BEST DEAL

ON

The ALL NEW AURICON PRO-600

for 16mm Optical Sound-On-Film



"Auricon Pro 600" with Lens, Finder, and Magazine, Pro 600

Professional Picture Camera with Built-In Features



"Auricon Pro 600" with Single Lens, Viewfinder, Magazine



"Auricon Pro 600" with Optical Sound-On-Film, Pro 600

- Built-in features for complete silent or sound operation. The unique silent film loop of the "Auricon Pro 600" is silent proof of precision design. You want recording, "Auricon Pro 600" will do it. Pro 600, Camera silent.
- 500 ft. film magazine with Auricon Pro 600 camera. For 16 minutes of continuous filming. Picture, film, film.
- Sound-on-Film. Silent or "Single System" or "Double System" for recording.
- Available at silent or "Single System" equipment for optical sound. Silent or "Single System" for optical sound. Silent or "Single System" for optical sound. Silent or "Single System" for optical sound.

- Total with 30 day money back guarantee, you will be satisfied.

PRICES START AT \$1149

Write for free literature "Auricon Pro 600" literature and price schedule

SPECIAL OFFER to AURICON-PRO OWNERS

S.O.S. will accept your old camera as a trade-in for the "All New Auricon Pro-600". Time Payments, Too!

"The Department Store of the Motion Picture Industry"

S.O.S. CINEMA SUPPLY CORP. 602 WEST 52nd ST., NEW YORK 19, N.Y.

A K G

D-25

Microphone

Combines for first time most ideal features desired by the industry



1. Perfect Cardiod Performance—can sense 180° wind not AC hum—no ribbon element used
2. Higher level output—Actual plated curve of 30 to 75 KC. included with tube
3. Shock mounted—weight 34 oz., can be used on fish pole
4. Built in Double Speaker with 2 ways. Ideal for tape recorders with no equalizers, like Magnasonic, Ampex, Stancil Hoffman, Hellen, etc.

Model D-25, \$200—Model D-25, identical but has shock mount, \$180

Film Numbering Pays Off

Unmatched film service can feature and save time. The MDY edge numbers every foot of 16, 17 1/2, 35mm film and supplies the best of checking films, footage.

The MDY Visible Edge Film Numbering Machine



The MDY replaces our maps, publications, many weapons, punches, cardboards—does not require soluble film. With prints showing special effects, fades and dissolves require edge numbering to keep down of frames cut or added. Multiple magnetic marks at Cinema Super stereoscopic recordings make edge numbering a MUST. Write for literature.

With NEW Improved Non-Dog Inking System \$2475

Proven MDY system can easily control the new and improved inking system.

ANDREW, BUCKLEY, PERKINS & ASS.

Boston, Mass. Co., Boston, N.Y.
General Film Co., Hollywood, Calif.
Barron, Southwick, Springfield, Conn.
American Optical, (Gold AD), Hollywood

Holland & Weyman, Buffalo, N.Y.
Industries Supply Atlantic, N.Y.C.
Cinema Productions, New York
Columbia Broadcasting System, N.Y.

SEE PAGE 481 FOR IMPORTANT OFFERINGS ON ANIMATION EQUIPMENT AND FILM PROCESSOR



Why SOUND MASTERS Selected... The ARRIFLEX 35 Model 11A To Shoot *'Speechless By Mistake'* for the Bell System

The Bell System wanted a color film that would help prevent accidental damage to buried and aerial telephone cables by downmixing some of the common causes of such damage and their effect on vital communications. SOUND MASTERS of New York was selected to make the film.

The script called for "on location" filming—in fields, on highways, in ditches, on "Main Street". More than 95% of the film required live, lip-synchronized sound. A versatile, easily maneuverable camera was needed for this job.

SOUND MASTERS selected the Arriflex 35 Model 11A with Synchronous Motor and Sound-Proof Binsp—and filmed all the sequences with this equipment within a period of five weeks. *Speechless By Mistake* has been completed and will soon be released by the local Bell Telephone Companies for public showings.

Says Mr. F. C. Wood, Jr. vice president in charge of production, "We acquired and used the Arriflex outfit

because it was the lightest, most compact equipment we could find. It would have been next to impossible to have done the job so quickly and easily with any other camera. The Binsp was perfect both indoors and out.

"Needless to say, we were pleased with the results, as was also the client. The pictures were rock steady and needle sharp—thanks to the new film gate and intermittent, and to those wonderful Schneider lenses. The whole film was a complete success.

"The most wonderful thing about the whole deal is that the price of the complete outfit was hardly more than what it would have cost us to rent other equipment."

And Mr. Wood's experience is, by no means, different or unique, for many other producers and cameramen have discovered the economy, the quality and the versatility of the Arriflex 35. No more easily manageable camera exists anywhere. Yet, it has every facility and convenience for truly first-rate filming.



Write for complete information to:

Sole U.S. Agents • **KLING PHOTO CORP.**

233 North Ave., New York 3, N. Y.
7300 Mahan Ave., Hollywood 46, Cal.

F & B PRO CINE—THE MOST

IMPROVED

TRIPOD IN THE MEDIUM WEIGHT CLASS

FOR ALL CAMERAS



Does your tripod include these exclusive PRO CINE features?

- A. External camera tightening knob with angle gears
- B. Telescoping, offset tripod handle
- C. Second tripod handle position
- D. Large positive pan and tilt locks
- E. Brass shaft for longer wear, no sticking
- F. Separate, precision machined friction plate
- G. Four belted leg supports with leg rest ledge
- H. Aluminum leg tops—no holes drilled thru wood legs
- I. Single knob leg tightening—for even tension and no warping
- J. Superb, seasoned and waxed hardwood legs, will never stick

Finest Precision Craftsmanship and Materials

TRIPOD HEAD UNCONDITIONALLY GUARANTEED FOR FIVE YEARS

MADE IN U.S.A.
EXCLUSIVELY BY F&B

Price \$145.00
Heavy Duty Fibre Case \$30.00

Available direct
or at leading camera dealers

F & B SPLIT REELS



Ever Have the Center Drop Out?

**Eliminates FLANGES and
risky TIGHTWINDS**

Simply open Split Reels—drop in film on
core and work with safety, speed and
accuracy.

400 F. SPLIT REEL	\$4.50
600 " " "	6.00
1200 " " "	7.50
1600 " " "	9.00

IMMEDIATE DELIVERY

Now the
**LARGEST STREET-LEVEL
SHOWROOM IN NEW YORK**
located exclusively at **MIDTOWN PICCOLA**
AMUSEMENT, some of the expanded facilities we will offer to film personnel are these:
COMPLETE RENTAL SERVICE Cam
eras, lighting, making, recording and post
production.
CONVENIENCE Street level, midtown
location.
EXPERIENCED TECHNICAL PERSONNEL
with professional year-round guidance.
**COMPLETE EQUIPMENT MAINTENANCE &
ENGINEERING DEPT.** Staffed by ex
pert technicians.
NEAR CREDIT PURCHASE FACILITIES
extended time payment service. Also 40
down to 36 months.
LOCATED IN MIDTOWN MANHATTAN
Near all transportation hotels and con
venience centers.

F&B EQUIPMENT CATALOG—24 Pages.
List all equipment you need for film
production.
F&B RENTAL PRICE LIST—14 Pages.
Complete guide for all equipment at
your fingertips about the cost of making
equipment for Production. Projection. Re
cording. Lighting and Editing.
BOTH CATALOGS FREE FOR THE ASKING

SHOOTING COLOR IN A CAVE!

**HUGE INDUSTRIAL
INTERIORS**

**AUDIENCE
REACTION SHOTS**

**COLOR
NEWSREELS**



**F & B
NOMINAR 1" f/0.95 LENS**

In C-mount for all 16mm cameras
"THE FASTEST ONE LENS IN THE WORLD!"
More than twice as fast as f/1.4

Outlines, resolution and contrast so good as better
than any comparable lens

Price \$165.00 \$9.90 PER

Technology—

Series VI film holder, included
Screw on dust cover
Leather carrying case



FLORMAN & BABB

68 West 48th Street, New York 36, N. Y.

Phone: Murray Hill 2-2928

Cable Address—FLORBABB, N. Y.



without tools,

art is helpless...

**Capital skills
are your tools
for finer films**

Capital Film Laboratories
offers to the creative producer
the finest motion picture laboratory equipment
plus the priceless ingredient...
the personal attention
of our select staff of skilled craftsmen.

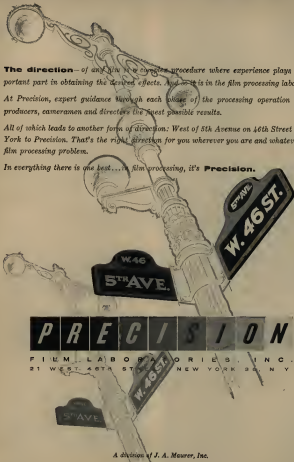
PRINTS BY CAPITAL



CAPITAL
FILM LABORATORIES, INC.

1005 Fairview Ave., N.E., Washington 2, D.C.
Telephone LAwrence 6-4834

Editing
Processing
Printing
RCA Sound Recording
Service Studios



The direction—of any film is a complex procedure where experience plays an important part in obtaining the desired effects. And so it is in the film processing laboratory.

At Precision, expert guidance through each phase of the processing operation assures producers, cameramen and directors the finest possible results.

All of which leads to another form of direction: West of 5th Avenue on 46th Street in New York to Precision. That's the right direction for you wherever you are and whatever your film processing problem.

In everything there is one best...in film processing, it's **Precision.**

P R E C I S I O N

F I L M L A B O R A T O R I E S , I N C .
21 WEST 46TH STREET NEW YORK 36, N. Y.

A division of J. A. Maurer, Inc.

Auricon
Hollywood

Play Ball!

WPTZ FILMS "TELERAMA" SHOW with AURICON "SUPER 1200" 16mm Sound-On-Film Camera...

Westinghouse's TV Station WPTZ in Philadelphia, produces a new type of public service program called "Telarama" which combines live TV Camera pick-ups with "Talking Pictures" especially filmed for "Telarama" using the Auricon 16mm "Super 1200" Sound-On-Film Recording Camera.

Adhering strictly to happenings of unusual interest, including big league sports, the WPTZ Camera Crew gets the sound and the picture on the same film at the same time, using the Auricon "Super 1200" Camera. The "Super 1200" Telephoto Finder System, as well as the Auto Parallax View Finder, provide an ideal means for photographing sporting and news events with precision and dependability!

For superb filming results and high fidelity broadcasting on TV, use Auricon "Super 1200" 16mm Sound-On-Film Recording Equipment.

Auricon Cameras are sold with a 30-day money-back guarantee. You must be satisfied! Write today for free illustrated Auricon catalog



Berndt-Bach, Inc.
1875 Avenue of the Stars
Beverly Hills, California

Testimonial

We want to congratulate you on the superb performance of the Auricon "Super 1200" 16mm Sound-On-Film Camera.

The Auricon is the most successful camera that we have used. The producer of a program such as "Telarama", the important thing is to get the story in film as it happens. Secondly, it is vital to capturing the story, as well as capturing sound, reliable sound is a must for the story to stand. The excellent manner of "Telarama" is due to large part to the picture and sound recording facilities and complete responsibility of our Auricon Engineers. Best of our filming is in having such easy individual working and excellent facilities.

The ease of working and excellent recording facilities of the "Super 1200" plus the excellent View-Finder and Telephoto System, make Auricon the best bet in our opinion - for filming sports and news events!

BERNDET-BACH, INC.
WESTINGHOUSE ASSOCIATED COMPANY

Long A. Bell

Long A. Bell
Director

Orville Jones
Executive Director

Philadelphia Broadcasting Company, Inc. 1950-1951

Auricon

A PRODUCT OF

BERNDT-BACH, INC.

5902 Resolute Street, Hollywood 38, California

MANUFACTURERS OF SOUND-ON-FILM
RECORDING EQUIPMENT SINCE 1931



TYPE 1200

TYPE 1200 (with 1200)

TYPE 1200 (with 1200)

TYPE 1200 (with 1200)

TYPE 1200 (with 1200)

TYPE 1200 (with 1200)

ONE CAMERA

16mm or 35mm

in 10 SECONDS!

Camerette 16/35

Reflex Motion Picture Camera

The perfect camera for the motion picture filmmaker working in both 16mm or 35mm color or black and white

LOOK AT THESE ADVANTAGES—

- The same lenses, same motor drives, same sound blimp, and accessory equipment used for both 16mm or 35mm — to convert simply change the magazine.
- Precise rugged movement
- Reflex viewing
- 200 degree adjustable shutter
- Divergent lenses built in
- Automatic film gate 400' magazines 16 or 35mm — the 16mm magazine will accommodate daylight spools as well as standard rare lead
- Light weight — only 14 pounds with 3 lenses, 400' magazine, and 4/8 volt motor

Write for brochure



C

amerette

patents covered except

Manufactured by Drs. Cine, Eclair, Paris



Hollywood Bulletin Board

Arthur Edeson, chairman of the A.S.C. entertainment committee, has announced that date for the Society's annual *Laurels-Night* Dinner and Dance has been set for Saturday evening, October 29th. A black-tie affair, it is to take place in the Mayfair Room of the Beverly Wilshire Hotel in Beverly Hills. Event will mark the first time in over 10 years that it has not been held at the Society's clubhouse in Hollywood. An invitational affair, it is restricted to A.S.C. members and their wives.

John Arnold, A.S.C., head of the camera department at M.G.M. Studios, is credited with making possible by a new process the important photographic reproduction of a score of Van Gogh's memorial paintings for the studio's forthcoming color and CinemaScope production, "Last for Life."

Process makes it possible to put the Van Gogh art on the wide screen with greater clarity and detail than when the pictures are photographed direct with the movie camera.

Benjamin Berg, A.S.C., whose diverse enterprises include a television film recording business and an agency for the distribution of Eclair cameras in the U.S., is also a short subject producer of note.

He recently completed a unique 20 minute short in black and white on the life of the Spanish artist Goya. Film has an live action but tells its story through a series of studies of Goya art coupled with well-written narrative, and back grounded by a remarkable score of guitar music.

James Van Trees, A.S.C., who was recently signed by McCadden Productions, Hollywood, to photograph a new *Andy* TV pilot film, developed a unique transition method which enables Charles Correll and Freeman Gosden, stars of the show, to go from white face to black face without need for stopping the cameras. Forest of the new *Andy* series will have Correll and Gosden open the show as themselves, then assume black face and dialect as they go into their comedy roles.

Stanley Cortes, A.S.C., whose unique black-and-white photography of "Night of The Hunter" has received accolades in the press, was signed last month to direct the photography of "The Naked and The Dead," to be directed by Charles Laughton. Initial shooting started in the Hawaiian Islands.

Gil Worenman, A.S.C., called "the most traveled cameraman in Hollywood," was signed recently by Charles E. Skinner Productions to direct the photography of a new TV film series, "Sgt. Preston of The Yukon." As with most of his assignments, this one took him out of Hollywood—this time to Aspen, Colorado—where he shot exteriors surrounding the Canadian and Alaskan wilds.

Harold Stine, A.S.C., has been signed by Warner Brothers to direct the photography of two of the studio's new TV film series—"Casablanca" and "Behind The Camera."

Carl Struss, A.S.C., will direct the photography of "Mehvek" for Alperman Productions.

Walter Strunge, A.S.C., who recently concluded directing the photography of the "Marge" TV film series at Hal Roach Studios, has been signed by Family Films for a new series of films to be produced at Kluge Studios, Hollywood.

The Society of Motion Picture and Television Engineers has set the dates for two of its future conventions in Los Angeles. The first is scheduled for October 7th to 12th, 1956, and the other—nearly two years later—April 20th to 26th, 1958. Both conventions will be held at the Hotel Ambassador.

Next convention of the society takes place this coming October, (led to the 7th) at Lake Placid, New York.

Dis-TV's expanded program of production which includes five new video film series for the fall promises lots of work for Hollywood cinematographers. New films are "Dr. Christmas," "I Love A Mystery," "The Man Called X," "Mr. and Mrs.," and "Craig Rice."



CAMERETTE

*Now Available with Two
Important New Features!*

- ★ Adopted for CinemaScope
- ★ Sound Blimp with Reflex Viewing

Now for the first time—a lightweight camera for CinemaScope photography—the 35mm Camerette with CinemaScope aperture, with full CinemaScope field visible through the reflex viewer. Auxiliary turret and matte for regular photography.

New magnesium alloy blimp with viewing through the taking lens at all times through the Camerette's reflex finder, making a lightweight, fully blimped combination 16mm or 35mm camera. Synchronous motors—110-v single phase, 220-v three phase.

ONLY THE CAMERETTE HAS

- 1 Ability to use both 16mm and 35mm film in one camera.
- 2 Reflex viewing through the taking lens at all times for both film sizes.
- 3 Sound blimp with reflex viewing, making a fully blimped, instantly interchangeable 16mm or 35mm camera.

*Patents Covered-Market
Manufactured by Bell, Inc.*

Write for descriptive literature



BENJAMIN BERG COMPANY

1410 N. VAN NESS AVE. • HOLLYWOOD 28, CALIF. • HOLLYWOOD 9-8001

The Filming Of "Forbidden Planet"

The most pretentious science-fiction thriller yet filmed, this MGM production called for use of every cinematographic trick in the book.

By GEORGE FOLSEY, A S C

WHEN I WAS ASSIGNED to direct the photography of Metro-Goldwyn-Mayer's science-fiction thriller, "Forbidden Planet," I was faced with two unique problems: photographing a new star—a mechanical robot nearly seven feet tall—and lighting the futuristic settings of a fabulous land never before seen on the screen.

Locale of the story is a mythical planet millions of miles in outer space, where the sky is of a strange green hue and where an invisible monster prowls the desolate terrain. All sets, of course, were built on the sound stage. The story is set in the year 2300 A. D., and stars Walter Pidgeon as a scientist, and attractive Anne Francis as his daughter, with a newcomer, Leslie Nielsen, making his screen debut as the hero.

More than two years of technical research was undertaken on the production by the studio before it was turned over to producer Nicholas Nayfack and director Fred Wilcox. But research did not stop here. Actually, the important pre-production planning began when we started to visualize the sets

and the action from the camera's viewpoint. With a completely new subject and a locale virtually dreamed up out of fantasy, the production posed a fresh new challenge, photographically.

The photos on the opposite page will give the reader some idea of the unique sets which were prepared for the production by supervising art director Cedric Gibbard and art director Arthur Loewer. Because so much of these vast settings—designed for CinemaScope and color film—comprised giant painted backdrops or cycloramas, the problem of matching the lighting, or achieving the lighting gradations, far surpassed anything that is encountered in the conventional type of production.

In addition to the sets, which required all the floor space of four of the studio's largest sound stages, mechanical windrudy and prop-shop skill had brought forth the most unusual of science-fiction innovations. Important props included an atomic cannon, a space jeep, and electro-magnetic tractor, and the picture's most menacing personage, Robby the mechanical robot.

The robot's massive body was motivated by six electric motors, and was controlled through a complicated switchboard panel. He had complete mobility of arms, legs and head. More than two months of trial-and-error labor were required to successfully install the 2600 feet of electrical wiring that made the robot independent and self-operating.

A crew of 19 men worked a month to install the 27 miles of electrical wiring used in the control cabin of the space ship. In order to be able to successfully control the extensive illumination for this one set alone, a set-lighting switchboard was set up and manned by a score of electricians.

Biggest bugaboo, perhaps, on this picture was the ever-present selection of light. The fantastic, modernistic sets of bright metal and plastic banded light in almost every direction. An example were the "decker-ship chambers"—large tubular plastic tubes—into which space ship crew members must enter for a period of time when subjected to sudden change in atmospheric pressures—much as "suck bags" and deep-sea divers do after submersibles at submarine tanks. So, in addition to meeting the problem of getting adequate light on the set, we then had the problem of so placing it or making it as to keep it from bouncing off the bright surfaces and into the camera.

Equally challenging was a large Plexiglas globe in the center of this same set. It measured nearly 16 feet in circumference, and enclosed a smaller globe within it which was surrounded by two bright steel bands as a decorative feature. It seemed for a time that it would be impossible to light this globe in a manner that wouldn't reflect light. The

(Continued on Page 411)



NEW PRODUCTIONS have demanded the meticulous placement of set lighting with as did M-G-M's "Forbidden Planet." This, however, is the many reflective surfaces which bounced light back toward the camera. Here director of photography George Folsey, A.S.C., (right) discusses a light change with gaffer Anthony Poccia, who uses a wireless indicator to relay instructions to electricians on setlights overhead.



THE SPACE DEEP leads us to the Forbidden Planet. Here miniature sets were skillfully married with full scale sets.



NOTE THE great depth of perspective achieved in this grand stage exterior scene of crewmen disembarking from ship.



ALMOST every prop in this ultra-scientific production created a lighting problem because of reflective surfaces.



AND FRANKS meets the Robot in the Fantastic House of Tomorrow. Note the generous use of effect lighting.



ONLY THE CinemaScope camera could have captured the full scope and awe-inspiring beauty of this imaginative setting . . .



WHICH George Pal's lighting and skillful camerawork was credited in giving complete authenticity.

CAMART PRODUCTS

DEVELOPED THROUGH YEARS OF EXPERIENCE AND USE!
GUARANTEED PROFESSIONAL RESULTS!



Patent Pending

● CAMART TIGHTWIND ADAPTER HERE'S 8 REASONS WHY YOU NEED IT!

- JUNKS SPLIT REELS AND FLANGES!
- Designed to fit all rewinds.
- Saves starting of film on reels.
- For left and right side rewinds.
- Chrome plated ball-bearing film guide roller.
- Takes male and female plastic cores.
- Eliminates dishing and film abrasions.
- Does not interfere with normal use of the rewind.

PRICE: \$29.00

Money Back Guarantee!

Send for descriptive literature.

● CAMART BABY DOLLY

- Not like a bicycle, but sturdy like a car.
- Will carry a heavy load and ride easy.
- Fits in your car.
- Can set camera from floor to six feet high.

PRICE: \$375.00



● CAMART CAR TOP CLAMPS

- Sturdy
- Made of bronze
- Easily fitted to your car top. Set of three \$28.00

● CAMART TRIANGLE

- Improved keystone center.
- Don't get floppy.
- Can't kick over your camera.
- Our own make, the best by test.

PRICE: \$29.50



● CAMART SLATE and CLAPSTICK

Still the best quality largest slate at the lowest price. Send for yours today!

Feb. New York

Only \$4.75



● CONE LIGHT

This unit sets a beam of shadowless soft light over any set. Used extensively in Hollywood productions for color as black and white photography.

Price, head only \$150.00



THE **CAMERA • MART** INC.

1845 BROADWAY at 60th ST.
NEW YORK 23, NEW YORK

PHONE: Circle 6-0930

CABLE: CAMERAMART



POSITION of camera made car is relatively inconspicuous, yet it has unobstructed view of road ahead. Using Tri-X 16mm film, clear pictures are possible at night with light furnished by automobile headlights.



METHOD of installing camera in patrol car is shown where the battery-driven Super 8-16 is mounted on an AutoPod. Four radio batteries in case, shown on car seat beside Oregon's Sheriff Edward W. Siler, power the camera motor.

Movies In Law Enforcement

New, fast 16mm film makes possible night movies of traffic violators, using only car headlights for illumination.

By R. HARLOW SCHILLIOS

DARKNESS, THE PROTECTIVE shield most popular and deadly with drunk drivers, is being dramatically ripped from them with something new in law enforcement.

In successful experiments, an Oregon Sheriff has found night movies of traffic drivers possible with lighting from patrol car headlights.

Fast film, first used for photographing night athletic events for reproduction on television, inspired the Lane County Sheriff's department to produce its own "selected short subjects."

With a Polaroid Bolex 16mm movie camera mounted on an AutoPod mount (see photo), and the camera powered by a series of five F1P1 Radio A batteries, the patrol car driver can easily shoot the pictures without detracting from normal driving operations.

Both Tri-X and Super-XX film have been used successfully with the camera speed preset at 16 frames per second and lighting supplied principally by standard automobile headlights.

With the camera's F/1.9 lens angled up to the wind-

shield, an embarrassing amount of information can be recorded for judge and jury to see.

Moreover, the "star" is oblivious to his being in the lime-light.

From test movies made at 11 p.m. on a clear night, Charles E. Smith, chief criminal deputy, reports the following: "Under mercury vapor overhead lighting or incandescent street lights, the suspect vehicle was clearly visible as was the highway center stripe. Make, model and license number showed clearly on the projection screen. The walk, facial expressions, gait and coordination of the operator were easily observed."

"In tests made on a rural, gravel road with no lighting other than the police car headlights, movements of the car and expressions of the operator after he had stopped from his auto were clearly recorded. However, the field of vision was sharply curtailed. Maximum range 10 feet for tracing, 25 feet for operator tests."

While the Lane Sheriff's office began filming traffic viola-

(Continued on Page 465)



THE NEW YELLOW FLAME CARBONS

New tool for set lighting produces less heat and results in greater economy in color film production

By CHARLES HANDLEY

Nicholson Carbon Company

RECENT DEVELOPMENT work led to the production of a high intensity type of positive carbon for motion picture set lighting which operates at a color temperature of approximately 3350° K. With the addition of a very light filter to remove a slight excess of blue and ultraviolet this light source may be freely mixed with incandescent tungsten for color film which has been balanced to tungsten illumination of the same color temperature. From an operating standpoint it means that the photographically effective light output of the carbon arc has been increased over 60% without additional power input.

From one viewpoint it would seem that white light, which is composed of equal parts of red, green and blue and is represented by sunlight itself, should be the ideal balance for a photographic light source. An equally balanced white light source lends itself to easier control when removal of some one color component is required, it is white light that provides most of the radiant energy for exterior photography.

The difficulty with the foregoing viewpoint is that incandescent tungsten has certain advantages in motion picture photography, and when mixed with white light for color filming one must be filtered to balance the other. It has been stated that at present it is possible to balance color film to that of a tungsten source on a much higher film speed rating to tungsten (and an equal speed rating to white light) than if a white light film balance were used. For this reason, apparently, professional color motion picture film is balanced to the tungsten source.

In converting white light to this tungsten balance a filter loss of at least 10% results. This situation is represented by the use of a "Beute" lamp with an MT-2 plus a Y-1 filter. By changing the carbon itself to a 3350° K. balancer, the MT-2 filter loss is eliminated.

Two of the inherent advantages of the carbon arc over other light sources in practical studio use are the great amount of light from one unit and small source size. These advantages make possible great carrying power, sharp shadows and the extreme is controllability.

Where separation of planes of vision are to be produced by high-level, controllable light sources and to create the il-

THREE SCENES on left illustrate use of the new yellow flame carbons in recent productions. Fig. 1 shows excellent modeling effect of sunlight achieved for a scene for "The Ten Commandments." Fig. 2 shows shadow detail, modeling and overall high-contrast effect achieved for "Satanstoe House." In Fig. 3, new blue shadow detail and highlights in scene from "Kismet" duplicate sunlight as though scene were shot in real locale.



FIG. 4—A peasant scene from M.G.M.'s *Granadino* production, "Diana," which required the handling of all types of lighting equipment and services in order to provide soft, but directional

illumination and balance in long the main characters on high points of interest while providing maximum separation. Director of photography was Robert Flinn, A.S.C.

lusion of depth and roundness through contrast perspective manipulation, the carbon arc has no parallel. Thus, for key-lighting, streak lighting, back-lighting and the creation of shadow detail through a high level of fill light the new yellow flame carbon arc provides a tool which will allow the director of photography to ascend to much greater heights in creating a perfect illusion.

Creative people in the motion picture industry have already started to fit this new tool into their work. How best to use it for the production of emotional effects which will forward the total story plan is a matter of individual achievement.

In testing and evaluating the yellow flame carbon a number of directors of photography were interviewed with the object of determining individual reactions.

Loyal Grege, A.S.C., who is director of photography on the Cecil B. De Mille current production of "The Ten Commandments" said, "I don't know how I could have shot 'The Ten Commandments' without the added power of yellow flame carbons. It was necessary to make a perfect match of the power, directional characteristics and brilliance of Egyptian sunbath. De Mille sets have always been terrific in scope, but the sets for 'The Ten Commandments' were beyond the superlatives that might ordinarily describe them. We had to have directional, controllable light sources with double the photographic effect of anything in current use. Yellow flame carbons provided the answer."

Figure 4 is a typical scene from this production which shows an excellent modeling effect of sunlight, giving form and interest to pillars and back wall.

George Foley, A.S.C., who photographed "Forbidden Planet," a Metro-Goldwyn-Mayer picture which features huge space ships, long-eared robots, and strange new worlds, has this to say: "I have just finished shooting 'Forbidden Planet' using the new yellow carbons—the first picture on the lot to use them. I found them extremely satisfactory and I had no difficulty with the color temperature matching that of the incandescent lamps. I found them especially bene-

ficial in duplicating sunlight. They were a great advantage in maintaining sharpness as far as my long shots were concerned and I am delighted I had the opportunity to use them."

The photography in Figure 2 shows the shadow detail, modelling and overall single source effect Mr. Foley created.

Joseph Rottenberg, A.S.C., who directed the photography of the lavish musical "Kismet," also a Metro-Goldwyn-Mayer picture says, "I am now using yellow flame carbons on 'Kis-

(Continued on Next Page)



FIG. 5—Another scene from "Diana," in which sunlight coming through the window is carefully balanced with controlled fill light to properly illuminate the characters without too much spill light falling on the walls.



FIG 6—Henry Stradling, A.S.C., found the new carbon particularly valuable in shooting the riotous Latin night club set in the "Guys and Dolls," where much of the illumination was coming through latticework and where it was necessary to use a high level of illumination and shoot with reduced shutter opening.

met" and the results are just fantastic, sharper definition and using less units on our big sets."

In Figure 3 note how the shadow detail and highlights in a scene from "Kismet" duplicate sunlight just as though the scene were shot in its true locale and under ideal light conditions. The highlight areas are broken up by interesting shadow detail which separates one object from the other and from the set background giving the illusion of depth.

Robert Plugg, A.S.C., did some outstanding painting with light on his Metro-Goldwyn-Mayer Cinemascope picture "Diane" which is laid in the 16th Century. Figure 5 is a pastoral scene which required deft handling of all types of lighting equipment and controls in order to provide a soft, but directional illumination and balance to keep the main characters as high points of interest while providing nice, even object separation. Figure 5 is another scene from "Diane" in which sunlight streaming through the window is carefully balanced with controlled fill light to properly illuminate the characters without too much spill light on the walls.

Henry Stradling, A.S.C., who was assigned to direct the photography on Samuel Goldwyn's super musical picture, "Guys and Dolls," almost switched the new yellow flame carbons from the furnace in order to obtain the light volume and carrying power he needed for a huge double street scene. He had them brought out to Hollywood by plane and put them into production immediately.

"My early evaluation of the new yellow flame carbon was fully justified," he said. "They provided twice the carrying power and light volume of any other lamp I could use and they played a major part in the successful photography of the picture. They were particularly valuable in the shooting of the riotous Latin night spot scene where much of the illumination was coming through latticework and where it was necessary to use a high level of illumination and stop action with narrow shutter opening. I used all of the 'Brutes' I could get." Figure 6 shows the night club scene mentioned by Mr. Stradling.

How to get the most from the yellow flame carbons on the basis of an efficient lighting tool may require some changes in placement techniques. If a "Brute" lamp is fitted with the new yellow flame carbon and is used in the same position as the same type of lamp with a white flame carbon plus the MT-2, Y-1 filter combination it will provide at least 60% more photographically effective light. However, if due to this placement it is necessary to use a scrim for the sole purpose of reducing light intensity, then much of the advantage of the new tool has been lost.

If the lamp can be moved back or flooded to make photographic use of the light that would otherwise be thrown away it will result in greater set lighting economy, less heat on the set and a smaller number of lamps than are presently required on large sets.

It is also planned to provide yellow flame carbons for the smaller Type-170 carbon arc lamps, and inasmuch as one of these at 150 amperes will about equal the photographic light output of the "Brute" lamp with white flame carbons and MT-2, Y-1 filters, it will be possible to save many hundreds of kilowatts of power by the judicious choice of units.

The carbon arc lamp can earn its own way from an economic as well as an artistic standpoint. If it is used in such a manner that its tremendous energy is allowed to reach the film.

Anyone who has had practical experience in set lighting realizes that the use of light interfering devices such as gobos, barn doors, mounts, scrims and other control tools are almost as necessary for photographic illusion as the original light source itself. But the making of motion pictures is a commercial venture as well as an artistic one and light control obtained through filtering, diffusing or blocking should be minimized as much as is practical without interfering with the emotional result.

One of the major problems which best studio engineering staffs at the present time is that of disposing of the heat liberated by the various light sources in use. Because of the higher levels of illumination necessary for the new wide-film processes and the longer throws required for sets having greater scope than in previous general use, the yellow flame carbon will give the director of photography an excellent opportunity to develop more efficient set lighting balances and to greatly minimize the heat problem.

The pre-lighting of sets is becoming more and more common where large areas are concerned. Nothing less than full dress rehearsal would allow for complete pre-lighting of sets.

(Continued on Page 404)

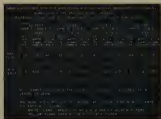


FIG 7—Where table shows the light output of the "Brute" lamp at various distances and for different beam spreads with filtered white flame and yellow flame carbons.

CAREFUL CHOICE of light units will enable the industrial film cameraman to achieve high professional quality in lighting his sets. Here, an eye light placed at one side of the camera and at the subject's shoulder, adds an extra measure of sparkle to the drudge.



SCENES FOR COMMERCIAL and industrial films, whether shot on the sound stage or on location, demand the same full lighting treatment that is given to theatrical films. One important thing that every producer and cameraman in this field must keep in mind is that audiences who see commercial films are accustomed to the smooth photographic quality of theatrical films and quite naturally expect to see that same quality in any motion picture it is asked to view.

This, of course, throws a sizeable responsibility on the cameraman assigned to a commercial picture. Most cameramen know that the factor for which they may be most easily criticized is the way the players look on the screen; and so the lighting of players is of utmost importance, even in the commercial film where the camera is so often trained on things rather than on people.

The primary factor to consider in lighting players is that they be adequately lighted no matter where they move about the set during the course of action. This means that in the longer shots, basic illumination must be considered first. Generally the cameraman knows that he wants lighting in a certain key, and he also has determined the lens

Set Lighting For Commercial Films

By CHARLES LORING



aperture at which he would like to shoot the scene. His next step is to add enough general illumination to meet these conditions.

After he has watched a walk-through of the action, he will be able to place his lights so that the players will be well lighted no matter where the action takes them. Banks of photofloods, floods or large spotlights flooded out are the best for general illumination purposes. Having placed these units, the spotlights which give quality and modeling to the players are added next. These include additional lights for key illumination, kickers, and top-lights or back-lights. In a long shot, exposure is determined

(Continued on Next Page)

THERE is no set rule for lighting close-ups. Here is an example of suspended lighting employed to create a dramatic high point—result of the cameraman's individual artistry.



EXAMPLE OF good standard lighting technique for a two shot. While the attention is held on the players, orientation of heads is retained by keeping the background lit to a subdued key.



DRAMATIC scenes on commercial films require that set lights be placed in such a manner that the players will be well lighted no matter where the action takes them on the set. Note here how lighting points up the secondary action within the scene—the waiter at the bar in the background. (Both photos on this page from the 20th Century-Fox production, "Under My Skin," photographed by Joe Lobbello, A.S.C.)

more or less by the intensity of the general illumination, and these modeling tones are balanced accordingly.

We have stated that the players should be adequately lighted no matter where they move on the set, but this statement should be qualified in low-key sequences especially, the source lighting indicated in often small table lamps which throw light only from one direction. In such a case it is quite proper technique to let a player go into silhouette or at least merge into a more subdued type of lighting when leaving the area covered by direct rays of the source of light. This type of lighting is entirely realistic and very effective when passively executed in more dramatic sequences.

The most important part of any discussion of the lighting of players is, of course, that which pertains to the close-up. Here the cameraman must be especially precise, since the closeup lens accentuates the lighting flaws which may be present. The keylight in a closeup should correspond, at least generally, with the source established in the longer shots. Some cameramen, if they have a particular scheme of lighting in mind for the closeup, establish this in advance and then modify the general set lighting to correspond in the long shots.

It is impossible to describe any one setup as the right lighting for closeups, since every subject and every situation may require a different scheme; but there is a basic lighting which the cameraman can adopt to fit most requirements. It consists of placing the keylight to one side of the camera, at about a 45 degree angle to the subject facing front. It should be placed fairly well above the subject's eye level and pointed downward at him. The well known junior spotlight makes an ideal keylight for a closeup when set in this manner.

Next, the fill-light is set. This is placed on the opposite side of the camera in such a position as to soften any shadow cast by the key-light. The intensity of the fill-light will depend upon the contrast ratio which the cameraman feels is best for the mood of the scene he is filming. For color, a ratio between key and fill of 1 to 2 is practically foolproof, and a ratio of 1 to 3 will give a nice modeling effect (especially on human Commercial Kodachrome stock). However, unless you are after some special effect, it is best not to exceed 1 to 3 when shooting in color. In black-and-white, on the other hand, the sky is practically the limit regarding ratio—and even in normal lighting needs a ratio of at least 1 to 4 should be used to provide proper modeling.

After the key-light and the fill-light have been set, the cameraman may add

(Continued on Page 492)

EASTMAN

PROFESSIONAL

MOTION PICTURE

FILMS

W. J. GERMAN, Inc.

John Street
Fort Lee, New Jersey

6040 N. Pulaski Road
Chicago 30, Illinois

6677 Santa Monica Blvd.
Hollywood 38, California

MAGNASYNC
MAGNETIC FILM RECORDING
AND REPRODUCTION

Magnaphonic
SOUND SYSTEM

TEAMWORK is vital in EQUIPMENT, TOO!

The Magnasync X-400 Recorder and G-924 Mixer is a proven team that pays off in picture after picture . . . wherever the location!



John Sutherland production "The Living Circle" produced in the jungles of Honduras. Sound was recorded with Magnasync team—X-400 recorder and G-924 mixer by Mexican technicians.

Director Larry Lansburgh, owner of the Magnasync equipment, is famous for his Academy Oscar nominee "Beauty and the Beast" and the Walt Disney production "The Littlest Outlaw."

Magnasync 6994 Multi-Channel Microphone system

Designed specifically for motion picture sound recording this high level four channel mixer features lightweight portability (17 lbs.), sliding equalizers on each recording channel, master gain control, built-in Microphone talk-back system, and is engineered by and for sound engineers. Incorporating top quality components for the engineer who prefers a console mixing operation, the G-924 Mixer units can be placed side by side.

Producer Net Price \$375.00

Magnasync X-400 Recorder

Featuring extreme portability and economy, the X-400 is a complete synchronous beam magnetic film recording and reproducing channel, professional in every detail. Sliding mechanism and dished-in amplifier. Cases can also be mounted and placed side by side for those who desire "console operation." Portable projector interface can be made with a simple flexible cable connection.

Producer Net Price \$895.00

Send for complete specifications

ALL PRICES F.O.B. NORTH HOLLYWOOD, CALIFORNIA, EFFECTIVE JANUARY, 1955. SUBJECT TO CHANGE WITHOUT NOTICE.

DEALERS

NEW YORK—Camera Equipment Co., 1400 Broadway, New York 19.
TP 8-0406 8-1400 Cable Address CENEDUP
CHICAGO—Cathie Camera Service, Inc., 2310 Foster Ave.,
Chicago 32, Ill. BRing 8-2068

SAN FRANCISCO—Audio Camera Co., 41 Kearney St., San Francisco 38.
Calif. EDmond 3-7388
CANNON—Alex I. Clark, Ltd., 2741 Blair St., Toronto 16,
Ontario EDmond 1-3361

AMERICA'S LEADING MANUFACTURER OF MAGNETIC FILM RECORDING AND REPRODUCTION DEVICES



MAGNASYNC MANUFACTURING CO., LTD. • 5521 SUTHERLAND AVE., NORTH HOLLYWOOD, CALIF. • POBox 6-1692

Guts, Vision—Crying Needs To Rejuvenate Newsreels

Theatre newsreels need a face-lifting and injection of new drive. They need fresh window dressing in the form of new techniques and a renewal of every trick in the bag—competition, not cooperation with each other.

By CHARLES S. PEDEN

CHARLES S. PEDEN is a featured correspondent for *News of the Day* and has been since 1938. He is a man with faith and enthusiasm—faith in the medium in which he works and enthusiasm for the journalism of the screen which he believes is the greatest medium of communication devised by man. During his career he has seen the great days of the newsreel, roaming the world and pursuing it—from Fin fire walkers to the first air raid over Tokyo. And he has seen and in fact worked in that offspring of the screen newsreel, television news coverage.

The article that follows was written for and published in *Motion Picture Herald* (July 9, 1955) and because we believe that what Mr. Peden has to say will be of interest to a great many of our readers, it is being reprinted here with permission.—EDITOR.

I HAVE BEEN a newsreel man in the field for more than 25 years. A career of which I am very proud; and a business I love. There was a time when people would stop us to ask about our adventures, and the inevitable question as to what left us with our greatest impression. And like my contemporaries I would name some big story or spectacular catastrophe such as the crash of the Hindenburg.

Nowadays, however, these same people only ask one question, "What happened to the newsreels?" I would be less than a good reporter if I answered other than that rigor mortis is setting in. It is the most bewildering and tragic thing I have seen in my whole career.

I refer to the amazing attitude of both the motion picture big boys and the exhibitors. They both raise their hands in horror if asked to return the theatre newsreel to its former great prestige and popularity by added subsidies and rental fees. Yet the former will devote hundreds of thousands of dollars to revive old tired plots or build up unrealistic stars who have messed up things with their adonis dodos; and the latter, paradoxically enough, recognize news and will spend fantastic amounts to revive houses for giant screen, closed circuit

TV shows of sporting events in the name of public service. Remember that last.

Those of us who make and love the newsreel know its value. The public once held it in high esteem and would embrace it quickly. Honest exhibitors know in their hearts that it was a great asset, an attraction people sought. And most important, we live in a news-conscious period as never before. Our editors know it, too. Who fooled?

The thing becomes more incredible when it is obvious that the great television networks consider their newsreel pictures important enough to spot programs all through the day. Famous commentators dress up the presentations. Competition is keen. And in one case, Edward R. Murrow's "See It Now" show has won every honest news program can collect.

This writer knows a little about that. He was privileged to be on the staff of "See It Now" for three and a half years. Fred Friendly, the guiding genius and producer of the show, knew what he was doing when he came to the newsreels in the beginning for his film organization, equipment and personnel. Those of us behind the camera knew a great hope when he landed in. Not for him the short cuts. No dubbing, dipped versions,

etc. Despite much head-shaking, he demanded actual sound—if for no other effect than "presence"; he wanted to cover stories "back of beyond," and he was daring enough to bobber his bullets with extra-quick before his idea had a sponsor. That is the sort of guts we operated under in the old days. No hill too steep. No sand too deep. Good reporters thrive in that atmosphere. He demanded the works and got 'em. His faith paid off.

Now any newsreel organization in the business could have done the same thing. The vision and know-how was there. The courage was lacking. Costs entered the picture at first. Yet, almost a score of risky-dink, shoe-string TV producers will beg, borrow and steal to finance a pilot film of some charity show because they have faith. The newsreel had everything else—worldwide organization, equipment, experience, and men willing to try anything.

Actually, with all due respect to Mr. Friendly, and the undeniable skill and personality value of Mr. Murrow, newsreels in the old days did the same thing when they frequently included certain feature stories in their makeups.

Mark Twain once observed that there is nothing so timid as a million dollars. This seems to be the case so far as backing newsreel production nowadays. A camera attitude that threatens to destroy a great property. Even now, one by one the top men behind the camera, disillusioned and broken-hearted, are leaving decades old connections to join the ranks of TV newsreel producers because they know that the major spark, so necessary to good reporting, exists there—the competitive spirit and drive.

Befores making a few suggestions, this

(Continued on Next Page)



CHARLES S. PEDEN, *News of the Day* second man, in working regalia on events assigned to his outfit. Peden makes gas for much of the real, gutsy type of newsreel of yesterday.



NEWSREELS in the old days frequently included certain feature stories in their makeup, such as the story of TVA and its effect on the native farmers, which newsreels Charles W. Herbert, ABC, and his sound men recorded over a decade ago.

writer wants to get one thing straight. He likes TV newsreels and accepts them. But he doesn't think theatre newsreels should even attempt to compete as they now do. The time element is too high a barrier; and it will grow bigger when pictures are transmitted via tape. The theatre newsreel's forte should be to elaborate on those news briefs people see at home. Build up the basic report so that TV audiences will know that when they go to a theatre they will see a detailed version done entertainingly.

Only one good step has developed. The older companies are producing newsreel material for the TV networks. But it would seem this can have its disadvantages under the existing conditions. TV demands fast, brief and numerous subjects at the cost of quality sound and pictures. That is understandable and will improve in time. Unfortunately, in an effort to hit theatres quickly, this sort of coverage is slipping over into the original product. It seems wrong.

TV CENTERED AND IS VERY MANY cases newer men, accustomed to the silent head camera techniques. It takes years to develop a good sound newsreel cameraman. The experienced ones should be allowed to work on their medium entirely. Let them develop better stories with more meat in them, as they can well do.

Never mind the B&N-on-street, off-the-

carth-opinion type of coverage in theatrical newsreels. Show where that man comes from, what he is doing, who he is voting. Who cares what politicians and so-called oracles and others say about world affairs unless they can make solid statements? Let us see the thing in the works. A complete story of the Salk Vaccine from ring-tailed monkeys in Madagascar, to the injection in the sort of thing that theatre audiences could understand.

The old adage about the better mouse trap is still good. This should be the motto of the theatrical newsreel. Make it bigger, and better. Then exhibitors would be happy to present the newsreel in its former status as a feature of a well balanced program. Pay for it, too.

Sure, this thing will cost money. What new and good thing doesn't at first? The men who make the newsreels are dedicated to their work. All they ask is a little encouragement and backing from the top brass. They'll come up with a

class product. These men who once roamed to the ends of the earth in search of material, now operate as a tribe, a silver chain, almost inflexible financially, that makes assignment editors consider the tariff pages of funerals, rather than fast schedules. A hell of a note.

For those were the runs of trains and daring who sent their boys with Byrd to the Antarctic, over the North Pole, into volcanoes, through swamps and impenetrable jungles; the boys who okayed chartered aircraft, boats, trains and even dogsleds to get a story. And almost without exception their men came back with specs. Stories that caught the public fancy and made exhibitors paste one sheet outside their theatres.

Make the newsreel so good and big exhibitors will cry for it and wave fresh cash. They are seasoned showmen. They know a good thing when they see it. Return to the thousand-dollar reel where a man can sink his teeth into a subject and tell a good yarn. Send those experienced men out again. Forget the inclination to let local men with sound equipment take over assignments on big stories.

Bandung is a classical example. That distant meeting was no event for the old days. This time it was left to local men in most cases. Men who wouldn't dare poke a leg into some big wheel's face as old timers do. Here was one of the world's greatest international meetings, a hallmark of world affairs. What does anyone actually know about it? Mighty little from the films released. They were trivial by comparison with the past.

(Continued on Page 476)



NEWSREELS without sound-on-film. With the advent of sound there developed a new era for newsreels in which cameramen, like author Paulsen, teamed up with the cameraman to give value to the so-called "rush." Pictured is one of the old Paramount Sound News teams, identified only as "interviewer" and "soundman" in the caption.



*Manufacturers and
Distributors of:*

Bloop Punches
Cans, Film Strip
Editing Tables
Film Bins
Film Rocks
Flanges
Film Editing Gloves
Leader Stock, 16 & 35 mm
Measuring Machines
Plastic Cores, 16 & 35 mm
Reels, 16 & 35 mm
Reels, Non-Magnetic
Split Reels
Rewinds
Sound Readers
Splicers
Storage Cabinets
Vault Cans
Scotch Tape
Cloth Tape
Sound Recording Tapes

HOLLYWOOD FILM COMPANY

precision film editing equipment

956 NO. SEWARD ST.
HOLLYWOOD 38, CALIF

HO-23284

SHOOTING THE ENTIRE PICTURE ON LOCATION

In shooting "The Indian Fighter" on location near Bend, Oregon, almost every scene posed a lighting challenge for Wilfrid Cline, ASC.

By FRANK DAUGHERTY



CONTEMPLATING the next camera setup for "The Indian Fighter" is director of photography Wilfrid Cline, ASC, (left) and director Andre de Toth (right). Location, where action pictures was shot, was in Bend, Oregon.

INTERESTING use of sunlight reflectors for shooting light into vast shaded area of a scene, is shown here. Cinematographer Cline used the reflectors for almost every exterior shot.

WHEN A PICTURE must be photographed under new and unusual conditions, a flexible-minded director can be as great a factor as any other in aiding the cinematographer, according to Wilfrid Cline, A.S.C., who recently completed filming "The Indian Fighter" entirely on location in Bend, Oregon.

Director Andre de Toth, who directed the first independent for Kirk Douglas and his Bryna Productions, chose the locations himself, and was therefore willing to take full responsibility for helping meet the photographic problems which arose out of their use.

There was, first, the weather. Bend

lies on a 4000-foot shelf of the Cascade Mountains in central Oregon. Even during the months of May and June, when the pasture was shot, temperatures ranged from 19 to 90, sometimes in a single day. Even more important, mountain weather produces cloud formations in great abundance. A sky can be held and blue one moment, and the next be covered with fat floating clouds which test the patience of both director and cinematographer. It is sometimes impossible to match scenes shot a day previously or even an hour earlier. Multiply Hollywood's plague of overlying airplanes by twenty and you have some idea how bothersome clouds can be, according to Cline.

But it was just here that de Toth's attitude became *laissez*. Having chosen the location himself, he was first to do something about meeting their conditions. He took the clouds as they came. So, far from being dismayed by an overcast day, he declared it to be exactly what he wanted, and that the pictures about whom the story was related "probably had a lot of them."

Locations had been sought, as a matter of fact, from the Black Hills to Mexico. Nothing suitable, weatherwise, was discovered until the country around Bend was investigated. The story was an Oregon Trail narrative, and it seemed extremely suitable to film it in Oregon, when the locations were finally settled.



upon, even though the chief antagonists of this Indian fighter were Sioux, and no Sioux ranged in numbers that far west.

The chief obstacle to the Bead location was that Bead had no frontier fort, and, one of these figured largely in the story. Bead's enterprising Chamber of Commerce, hearing of this, came up with a practical suggestion: it would build the fort, and build it bigger, better, and more substantially than any frontier fort had actually been. Bead might rent it for future films, and it would be a big tourist attraction between pictures. It was settled that way.

But because Bead wanted to keep the fort, and because other pictures were to be made there, it had to be built solidly, to resist Oregon's eight months winter. This posed at least two problems with which cinematographer Chase was instantly and directly concerned. It meant there would be solid walls and walls which would make camera angles and overhead lighting almost out of the question, and it meant new-cut white ends of the 5000 lodge pole pines used in the construction would have to be made to look old.

Again de Toth intervened. He changed the script to make the story indicate that the fort had just been built or was still in construction. The white ends of the logs now fitted the story.

Indoor-outdoor scenes in the solidly constructed buildings inside the fort were more difficult, but had to be solved. No scenes were to be shot on Hollywood sound stages; everything must be finished on the location. Unfurnished log interiors had to be treated, so to speak, in the camera. They couldn't be painted. Chase made an RS filter do for the indoor-outdoor shooting, using mattes inside, placed wherever possible. Lights couldn't be put overhead, and it was impossible to knock a hole through the solid walls to place them there.

Here Chase pursued a daylight shooting technique, a sort of documentary photography, different from anything he had ever done in his long motion picture career; but it was surprisingly successful. Chase doubts if anyone ever shot a picture this way before, unless maybe the early Russians, with their penchant for realism made a few. But it is a method of picture making which he believes can be investigated with profit by Hollywood's independent picture mak-

(Continued on Page 481)



THREE PHOTOS at right illustrate the effective lighting achieved in camera interiors that provided no solid walls, etc., for lighting equipment and camera mobility. Top and center photos depict scenes shot inside fort at Bead, Oregon; lower photo illustrates effective lighting achieved in outdoor quarters of an Indian lodge for "The Indian Fighter."



ELEVEN ONE-SPECIAL 16mm cameras mounted on a circular base form the photographic unit for Circarama. Here cameras are being made ready to photograph a sequence for American Motors' display at Disneyland.

Eleven Cameras For Circarama

Walt Disney's engineers develop novel system for shooting movies for Disneyland display.

By LEIGH ALLEN



HERE the eleven One-Specials are being centered on their respective targets and bolted in place on the base plate. The synchronizing motor drives were added later. Supervising work is engineer Bernard Lyott (left) and cine technician Richard Van Doren.

CIRCARAMA, AN ADVANCE motion picture development consisting of a continuous image focused on a full 360 degree circular screen, was one of the outstanding innovations introduced at Disneyland Park, Anaheim, California, when it opened to the public last month. There, Circarama is a free attraction on the American Motor Corporation's exhibit in the Tomorrowland area of Walt Disney's amusement park.

Hailed as a step forward in the motion picture art, Circarama consists of a synchronized battery of Eastman 16mm model 25 sound projectors which synchronously project color and sound movies on 11 individual screens arranged in a complete circle. It constitutes the first known application of color and sound pictures to the circular screen. (It had been accomplished with black-and-white and silent films about forty years ago for a world's fair exhibit.) Spectators, standing in the middle of a specially-built theater, view the continuous action on an overhead screen eight feet high and 40 feet in diameter, which completely encloses the audience.

The method of making films for Circarama and the camera setup is a most interesting development. Eleven One-Special 16mm cameras are mounted on a circular baseplate and are so arranged that they cover a 360 degree view in eleven sequential segments. No effort is made to have the image area match up with that of the adjoining cameras, as is done in Circarama. Instead, there is a space of several inches separating each segment of the projection screen, and each camera is pre-focused to exactly cover the area of its corresponding screen. The narrow spacing between

(Continued on Page 485)



PHOTOGRAPHER crew on location in Monument Valley, Arizona, set lenses of the eleven cameras for focus and exposure prior to starting the photography of a sequence of scenes for the Circarama display for American Motors' exhibit at Disneyland.

DEDICATED TO BETTER PERFORMANCE

COLLAPSIBLE 3-WHEEL DOLLY

For motion picture and TV cameras. Sturdy cast aluminum. For standard or baby tripods. Additional heavy tripod point holders to control spread of siped legs. Adjustable spring seat. Extra wide rubber wheels. Brakes to draw clamps and other features.

For studio or location. Folds into one compact unit. Can be used with professional or semi-professional tripods.

'HYDROLLY'

TV OR
CAMERA DOLLY

The advanced dolly for instant movability — streamlined, lightweight, exceptionally sturdy. Nothing to get out of order. Many new advantages for easy operation. Hydraulic lift type for fast upward and downward motion of TV and motion picture cameras.



Swivel seat. Adjustable leveling head. Cast for assistant. In-line wheels for track use. Steering wheel, rigid floor locks. Hand pump or combination hand and motor pump. Easily transported in a station wagon. Fits through a 20" door.

SYNCHROMASTER SYNCHRONIZER

Our Exclusive Distributor
Neumade

Any combination of 18mm and/or 35mm sprockets assembled to specification. Cast aluminum. Fast lower type, adjustable frame dial. Fast finger sub release. Contact rollers adjusted individually for positive film contact. Sprocket shaft key lock. Insage counter, etc.

RENTALS

SALES • REPAIRS • SERVICE

LENS COATING

"T" STOP CALIBRATION

DESIGNING AND MANUFACTURING

lens mounts & camera adaptors for 16mm, 35mm, TV cameras.

BAUSCH & LOMB "BALTAR"

LENSES and others

for motion picture, TV cameras, 16mm to 40" focal lengths.

COMPLETE LINE of 16mm, 35mm cameras, dailies, synchroscopes, animation equipment, cutting pens and time lapse equipment.

MIL & BOWELL: Standard, Synema, Filma, MITCHELL: Standard, Hi speed, RMC, MC, 16mm.

ColorTran Groverlite

SENIOR & JUNIOR KITS

"A STUDIO IN A SUITCASE"

ColorTran replaces heavy and expensive equipment... gives you 16mm... films up to 3680m... from an ordinary 20 amp. house current. Equipped with hand-drawn, diffuser slots for filters, accents and other accessories. Ideal for studio or location shots.



PORTABLE MICROPHONE BOOM

For Studio or on Location. Lightweight — collapsible — for TV and motion picture production. Sturdy construction. Boom telescopes 7 ft. to 17 ft. Bear handle for directional mike control. A remote control permits 360° rotation of the microphone. Operator can push the boom and operate microphone swivel simultaneously. Extending rods make it simple to operate microphone rotation from floor. Microphone cable hangs outside of boom, preventing cable from tangling with the rotating mechanism. Ball bearing casters, rigid foot locks, pneumatic drop check for lowering the boom, etc.

VARIABLE- SPEED MOTOR with TACHOMETER

for Cine Special or Maurer Cameras

115 V. Universal Motor — AC-DC Synchro Drive for Cine Special. Variable Speed 2-64 frames. Adapter for Maurer Camera.

INTERCHANGEABLE MOTORS: 12 volt DC Variable Speed 2-64 frames. 115 Volt AC 60 Cycles, Synchro-drive Motor, Single Phase.

ANIMATION MOTORS: Cine Special, Maurer, Mitchell, B & H Motors, for Bolex and Filma Cameras.



NATIONAL PINE EQUIPMENT Inc

JOHN CLEMENS

ERWIN HAEWOOD



IN RECORDING a sound track of commentary for a film, it is important not to repeat in words what the picture shows on the screen. With many scenes, it is better to make silent notes containing information not to be edited.

SILENCE OR SOUND? Ask any amateur which he prefers and there's little doubt about his answer. Tape, strips or optical tracks seem to be regarded as the answer to every cine worker's prayer. Yet too often many amateurs adopt sound before they've completely learned the essentials of silent film making. As for exploiting the silent medium to its fullest extent, I'm inclined to think that it's never yet been done either by amateur or professional.

Look back to the late twenties and study the productions made just before the advent of sound. No matter what nationality the film you choose, you'll find plenty that is lively, vital and fresh. Experiments were continually being made then, and new ideas were encouraged. But sound came along before the professional was able to explore all the possibilities of the silent screen, and at most overnight the experiments were abandoned in the eagerness to cash in on the sound track.

How strange it is that hardly any amateurs have tried to continue from where the professionals left off. Instead, most silent productions today are either remounts of the very earliest days of the

cinema or merely look like mute versions of sound films. The amateur who concentrates on innovations in silent technique is rare indeed.

As a result, experiments in sound are ever rarer. Conservation in silence is bound to produce conservatism in a sound-track. Hardly one in a thousand film makers seem to realize that if picture and track are both saying the same thing, one of them is being wasted. This is the reason for the alarming preponderance of film commentaries which only state what is visually obvious, dialogue which merely underlines the situation, and music which drives home every point with disconcerting force.

Sound can add a new dimension to amateur films. It never has quite the importance of the stage, simply because the majority of people are more susceptible to visual than to aural impressions. But that hardly lessens its effectiveness, provided it is used with imagination and, equally important, discretion.

The perfect sound film—amateur or professional—has yet to be made. But it has been clear for many years that sound used as a kind of counterpoint to the pic-

Say Something Extra With Sound

When picture and sound track are both saying the same thing, one of them is being wasted.

By HAROLD BENSON

ture is far better than sound which only repeats the visual. This use of sound does not involve quite such exact synchronization as the more conventional method, which makes it all the more suitable for amateur experiments.

Two clever commentaries are the simplest examples of this technique. The pastiche shows, say, an unusual church in Westminster, London. The commentator says, "Queen Anne is said to have thrown a foot-stool at her architect in a rage. Looking at it as it lay upside down on the carpet, she demanded that he build her a church the same shape. This is the result."

(Continued on Page 402)



THIS is the type of amateur movie scene which too often is described as commentary as: "Here is an incident involving a Hesperia dog." That we can already see, what the commentary should tell is some interesting success fact about the subject or place.

NOW... MATCH EITHER WHITE OR YELLOW LIGHT FILMS WITH NATIONAL STUDIO ARC-CARBONS

The advantages of carbon arc studio lighting have long been recognized. Until recently, however, it was necessary to filter carbon arc sources very heavily when shooting on a yellow-light basis.

Now, with the new "National" yellow-light studio carbons, you can freely mix arc lamps and incies on the same set with minor filtering and virtually no loss of useful light. This new carbon nearly doubles the effective light from arc sources without additional power input — or, where arc-lighting is essential for broad coverage, penetration or modeling, it reduces by almost half the number of arc lamps needed for 3300° k film.

Here, again, National Carbon's research facilities, prompted by the company's long association with progress in film-making, have paved the way to substantial production economies without compromising the industry's high standards of excellence.



The term "National" is a registered trade mark
of Union Carbide and Carbon Corporation

NATIONAL CARBON COMPANY

A Division of Union Carbide and Carbon Corporation
30 East 42nd Street, New York 17, N.Y.

SALES OFFICES

Atlanta, Chicago, Dallas, Kansas City, Los Angeles,
New York, Pittsburgh, San Francisco

IN CANADA

Union Carbide Canada Limited, Toronto



FIG. 1

THE "FOCURET" consists of a system of lenses coupled with a measuring rangefinder. It is used to measure lens by means of the eyepiece (1). User sights through eyepiece (2) and turns focusing ring (3) until images gathered at (2) coincide. Focusing ring (4) automatically focuses the camera lens.

THE COUPLED range finder today is considered one of the most important features on a good still camera. It simplifies the matter of determining and setting focus and thus insures sharp results on just about every shot.

It was inevitable that the principle of the coupled range finder would eventually be adapted to cine cameras. It remained for Herman Schneider & Co., of Hamburg, Germany, to develop just such an accessory. Trademarked the "Focorect," it was introduced with high success at the Photokina (photographic show) recently held in Cologne.

For the cine cameraman, whose style of shooting for the most part is a good deal on the order of the snapshooting still photographer, a coupled range finder can insure the same consistency of sharp focus, shot after shot. The professional cinematographer who works with an assistant or a crew has little need for such an accessory because of the practice of "rushing a tape" before focus is set on each take.

The "Focorect" is a universal accessory for use on all cine cameras (other than those having a fixed focus lens) with lens-mount diameters of 22mm to 32mm (inclusive). It is easily attached to the front of the lens in the same manner as a color filter. A range of interchangeable adapters insures a proper fit on all camera makes and models.

Before the "Focorect" is attached, the camera lens is set at infinity. Then the "Focorect" is slipped over the lens and secured in place by tightening a knurled thumb screw. Thereafter, all focusing of the lens is done with the aid of the "Focorect" range finder now coupled to the lens.

The range finder section of the "Focorect" is usually mounted at an angle, as shown at right, to permit easy

A Coupled Range Finder For Cine Cameras

Unique gadget, when attached to camera lens, automatically takes over the function of focusing.

By ALVIND ROE

viewing of the finder image. The user sights through the eyepiece (2) (Fig. 1), and turns the focusing ring (4) until the outlines of the subject in the measuring field of the range finder coincide. At this point the exact distance of the subject to be photographed has been found and the camera lens automatically focused upon it. At no time is the focusing ring of the camera changed from its original infinity setting. The focusing range extends from $3\frac{1}{2}$ feet to infinity. An added feature of the "Focorect" is a depth of field scale attached to the back of the standard model.

The "Focorect" consists of a system of lenses coated on all surfaces which takes over from the camera lens the complete function of focusing. The result is the automatic and continuous coupling of the range finder. The instrument has an unusually large and bright measuring field which, even when seen at a distance of six inches, allows exact control of the movement of the outlines and their final coincidence.

(Continued on Page 81)



THE "FOCURET" mounted on a cine camera. The instrument is adaptable to all cine cameras having lenses in focusing mounts and lens mount diameters of 22mm to 32mm (inclusive).

The One-Stop Source Of Supply

A PROFITABLE ALL-PURPOSE FILM PROCESSOR



BRIDGMATIC JR. 16mm Automatic Reversal Developing Machine—Ideal for TV Stations, Photo Finishers, Industrial or Documentary Producers and Universities

Bridgmatic JR.
REVERSAL DEVELOPING MACHINE

BRIDGMATIC JR. REVERSAL processes quality pictures in minutes—spot news and sports events can be shown immediately after they occur. This is the perfect All Purpose Processor as it processes all film—Reversal speed 600' per hour—also does negative and positive film. Light tight compartment for daylight exposures—has 8 automatic wind heads—completely automatic. Dry to Dry.

MODEL R \$1995—Includes basic Bridgmatic features such as overdrive nylon bearings, oil sump, built-in dyes, blower, heating elements, 400' enclosed magazine and daylight compartment.

MODEL RA \$2495—Some basic features of Model R plus continuously variable speed control, 1200' enclosed magazine, feed in and take up elevators.

TAKE ADVANTAGE OF S.O.S. TIME-PAYMENT PLAN
Trade-Ins Accepted Rent-It!

THE ANSWER TO ECONOMY IN ANIMATION

TEL-ANIMA tools for Top Techniques. Greatest dollar for dollar value in the industry!

TEL-Animaprint

The first sensibly priced Hot Press Thin Machine for high quality, fast lettering. Prints dry from rollers for fast contact use. Animaprint gives perfect registration on paper or acetate only.

TEL-Animastand

A professional Animation Stand with a sturdy guaranteed by Animaprint Hot Press Thin Machine. Includes all basic movements—does everything the animator needs. Long needed to meet the most limited budget.

For MOTION PICTURE PRODUCERS, ANIMATORS, SPECIAL EFFECTS LABORATORIES, TV STATIONS, ADVERTISING AGENCIES, ETC.

Write for literature

Manufactured and distributed exclusively by S.O.S.



TEL-Animaprint
For letter films
Prints All Colors
17" high
14" wide
17 1/2" deep

PRICES FROM \$395



TEL-Animastand
17" in 4" field width
Mount S.W. H.S.
14" high
14" wide
17 1/2" deep

PRICES FROM \$1995

"The Department Store of the Motion Picture Industry"

S.O.S. CINEMA SUPPLY CORP.

602 WEST 52nd ST. NEW YORK 19, N.Y.
Phone: PLaza 7-0440 Cable: S0550ND

S.O.S.
EST. 1950

SEE PAGE 451 FOR IMPORTANT NEWS ON FILM NUMBERING MACHINES, CAMERAS, MICROPHONES

Now! A 400ft. Magazine For Your BOLEX H-16

Complete
with
Synchronous
Motor
and Base
•
Includes
Installation
and
Case



There is, undoubtedly, 400 ft. run of movie film—the 200 ft. magazine feeding spool may be used in the 400 ft. magazine. The 200 ft. spool can be used in the camera without removing or having magazine. Fully automatic. Cost 700.00. (Should a customer require such a spool, it is available at 10.00 each.) It will not be complete in Bolex form, but will be complete in Bolex form, but will be complete in Bolex form, but will be complete in Bolex form.



Ask about our Book-Order, Special
Order and Camera Case

CINEKOD CINE ENGINEERING
1394 Wilshire Ave. Hollywood 4, Calif.

THE FILMING OF "FORBIDDEN PLANET"

(Continued from Page 483)

solution was achieved by painstaking effort in changing position of the set lamps and by careful masking until the desired result was obtained.

Work of the set materials was also reflective with the result that we can instantly pick up released light around and in back of people. Here, again, the obscures bouncing light was neutralized by studied placement of set lighting units.

When it came to shooting scenes in the control cabin of the space ship, we encountered a fresh new batch of problems. The cabin was a mass of radar screens and luminous dials, blinking and vibrating. We had to carefully control our lighting here so that some instruments would not show too brightly while others would shine through the darkness and not be lost on the screen.

The real lighting and photographic creation for this production, however, was the weird and spine tingling invisible monster that creeps into the control center late at night while the crew sleeps soundly in their bunks. While this was

something of an effort, it had to be treated with light and given a semblance of form. Through an arrangement of special lighting, shadowing and use of color, we produced a most unusual effect on film. And by using several well-established photographic techniques, such as shooting from a moving camera crane elevated to a height of ten feet, the effect achieved was that of showing the scene as seen from the giant monster's eyes.

There were more challenging problems awaiting us when we moved over to the immense space ship set on stage 15. Supplementing this set was an enormous painted cyclorama, 350 feet in length, lying in the background. It was here that particular care had to be given set lighting—first to make sure that the light source direction matched exactly the lighting depicted in the painted cyclorama. Any error here would surely suggest where the constructed set left off and the painted backdrop began.

Here we used forty of the M-G-M-designed Skylights, each holding ten 1000-watt photo lamps. These were augmented by 90 10,000-watt K-19's and 192 K-5's. Auxiliary power lines were run in from adjoining sound stages to furnish the unprecedented current load for this vast array of lighting equipment.

On this set, I encountered several lighting problems which were not easy to solve. First, the silver finish of the huge space ship reflected light like a mirror. Secondly, we encountered difficulty in silhouetting the saucer edge against the sky because the sky in the background was dark green above, graduating to light green toward the horizon. We couldn't light from below the set because it would reflect, so our first solution was to hide an occasional "Scener," "Junior" or "Midget" lamp behind conventional set elements and props, thus lighting the saucer from the interior of the set itself. I think this was perhaps one of the most interesting set lighting problems I have ever been called upon to solve.

Still another problem was that of



ALL MODELS FIT
IN YOUR CASE

For Prices and Literature

Ask Your Dealer or Write
CINEKAD ENGINEERING CO.
300 WEST 32ND ST. NEW YORK 19, N.Y.
PLAZA 2-2111

DESIGNED AND MANUFACTURED BY
CINEKAD ENGINEERING CO.

CINEKAD Microphone Booms

CINEKAD Mike Booms are light in weight, rigidly constructed, precision engineered and ideal for location or studio work

- 1 Model C-11 extends from 6 to 11 feet.
- 2 Model C-12 extends from 7 to 12 feet; has internal directional mike control.
- 3 Model "Murex" extends from 7 to 18 feet; has internal fixed isolation directional mike control.
- 4 Model C-14 extends from 7 to 18½ feet; has external directional mike control.
- 5 "Hibale" mike boom extends from 6 to 12 feet. The telescopic feature permits operator to handle "Hibale" mike boom for hours without fatigue.

Each CINEKAD Mike Boom has a sturdy 6-foot stand, which can be elevated to a height of 10 feet.

MAIN TITLES • FADES • DISSOLVES • WIPES • SUPERIMPOSURES

OPTICAL EFFECTS

35mm or 16mm

MATTES • INSERTS

BLACK and WHITE

Write or Call Ray Mercer

or COLOR

FOR SPECIAL PHOTOGRAPHIC EFFECTS INFORMATION AND OPTICAL CHART

RAY MERCER & CO.

4241 NORMAL AVE., HOLLYWOOD, CALIF. • NORMONDY 3-9331

shooting series on this set at night, when the backgrounds had to emphasize a pronounced eerie tone. In one of the night sequences, the invisible creature attacks the flying saucer and its crew while unleashing a barrage of tracer fire from atomic weapons. I illuminated the lonely desert setting with 500 foot candles as effect in the foreground and put 54 foot candles of light in the background. We had to imagine the monster, how bright he blazed, and how undulating his fiery outline would reflect around him. Much of the desired effect was achieved by putting colored filters over the arcs. Incidentally, red is not the easiest color to reproduce, and an invisible villain not the easiest to record on film. So it was difficult to get a perfect take of Nothing? To effectively photograph scenes indicating the approach of the invisible monster as he headed directly for the camera, I employed 62 10,000-watt arc lamps and 32 K 5's to light up the mythical planetary desert with absolutely no one visible. The effect of the monster's approach was achieved by changing the lighting in a pre-determined pattern, using vacuum-type shutters over each arc. Several onlookers on the set said they actually felt the invisible monster pass in front of the camera, so realistic was this lighting effect.

Another elaborate set for "Forbidden Planet" was the electronics laboratory. This required 50,000 feet of wiring, 2500 feet of neon tubing, and 1200 square yards of plexiglass in its construction. To achieve precise lighting on this set during shooting, a staff of 15 electricians handled 110 separate switches on a plant control panel.

Ever-present light reflections continued to plague us on this set, too; but by this time we had gotten down to a fine science the technique of changing the light and dulling bright surfaces with wax to look the problem.

On the lab set we shot one of the longest scenes ever filmed in CinemaScope. It ran continuously for 9½ minutes and entailed more than six pages of dialogue. In one single unbroken take more than 1300 words were spoken while our camera, mounted on a mobile crane, made 16 different moves on cue, short-cutting the necessity of having to make an equal number of separate setups.

It was on this set, too, that we photographed one of the production's most exciting sequences when the diabolical monster, in a spine-chilling climax, breaks through four hoops and doors to face its creator, Dr. Morbius.

One of the largest sets for the picture, and one on which a great deal of important action takes place is the "House of Tomorrow," the residence of Dr. Morbius and his daughter. In erecting this set, novel use was made of glass, metal,

Kinevox®

16mm Synchronous Magnetic Film Recorder



\$695.00

A precision-made unit designed and engineered for 16mm magnetic film. Filtered drive between synchronous motor and precision sprocket. One compact unit houses both transport mechanism and amplifiers.

Write for descriptive catalog on complete synchronous recording equipment and accessories

KINEVOX

INC.

KINEVOX BUILDING
116 S. HOLLYWOOD WAY
BURBANK, CALIFORNIA

Telephone: WInnie 9-1291

CABLE: KINEVOX BURBANK



Ideal for TV, research, industrial and educational films. Does complete reversal processing job, from camera to projector, in 25 minutes including developing, rinsing, bleaching, fixing, washing, drying, footage count.

A complete negative, positive, and re-verse machine. Register price \$5375.86. Specially priced, cost of new for a

limited time only **SPECIAL-\$1975**

Also available in used condition at big discounts.

Write for details.

Houston 16mm Processing Machines

gordon enterprises

2000 NORTH HUNTINGTON BOULEVARD
NORTH HOLLYWOOD, CALIFORNIA
TELEPHONE: 704-8000 HOLLYWOOD

Ready-Eddy

U. S. Registered Trademark
FOURTH YEAR — USEFULNESS ACKNOWLEDGED
BY THOUSANDS

1600 Ready Eddy Film

5' Reelings, 8' Reelings,
Covers, 8' Screen Time,
8' 10mm and 16mm
equivalents.

Proven computer for
exposure in movies and
TV, from script to
screen.

\$2.00 Perfoot

(delivered to U.S.A.)

ASK FOR REFUND OF SERVICE

IN AMERICAN CINEASTOGRAPH

Write or ask your dealer

READY-EDDY, Sandy Hook, Conn.



distinctive
Cinematography
by *McCharles Link*
1100 HYDE PARK BLVD., ALC 25
HOUSTON 3-1960
Color *a Specialty*

plastics and synthetics. The structure was erected on slender V-shaped legs that gave it the maximum of substantial support with minimum of material. Large, built-in screens of fine gold mesh separated the various rooms. The living room was divided by large panels of clear lucite. Most of the ideas that went into the design of the house were not based on fantasy, but are an extension of current thought, both architectural and electronic. Nevertheless, it all presented a host of new lighting and camera problems creating a constant challenge to the photographer.

The entire photographic crew that worked with me is especially deserving of credit, particularly for the precise coordination of all hands, and the efficient, smooth way they worked when we had a problem to lick. Especially is this true of Irving Ben, ASC, and Max Fabian, ASC, for their wonderful cooperation and help in the execution of the optical and photographic effects for the production.

Incidentally, "Forbidden Planet" is not my first encounter with a science-fiction production. "Way back" in 1922 I photographed a thriller for Biograph Studios in New York titled "The Man From Mars" featuring unearthly creatures with huge heads and gleaming talons. I shot the production in black-and-white in a "new" process they called A-D! I recall that most of the picture was shot at a stop of 1/8, and without the benefit of an exposure meter.

"Forbidden Planet" is color and CinemaScope is a far cry from this early Biograph production. For up to this has been one of the most "off-beat" camera assignments I have ever undertaken since joining the M-G-M camera staff in 1932.

YELLOW FLAME CARBONS

(Continued from Page 456)

and even then last minute changes would have to be made to balance reflectivity of costumes, skin textures, etc. Nevertheless, on sets where a great amount of electrical energy is to be used, pre-lighting will give the director of photography an opportunity to arrange his lamps so the maximum illumination possible reaches the film.

Figure 7 shows the light output of the "Brute" lamp at various distances and for different beam spreads with filtered white flame and yellow flame carbons. It represents a sample of the type of information which may result if pre-lighting time allocation is allowed so the director of photography and chief set electrician may develop lighting techniques which will provide the maximum practical utilization of the equipment.

At no time in the history of the busi-

It's easy with the
MERCER FILM PATCH
Description Chart & Price List
Mailed on Request
R.C. MERCER & COMPANY
4341 Normal Ave., Hollywood 28, Calif.
ND60000 2-1923

GEO W. CULBOURN LABORATORY INC.
104 NORTH WACKER DRIVE • CHICAGO 9
TELEPHONE STATE 6-0110

8 and 16mm SERVICES

To Sell To

THE MOTION PICTURE INDUSTRY

YOU

NEED

AMERICAN

CINEMATOGRAPHER

ness has studio management shown such an interest in the problems of adequate set lighting as at present. Requests, even demands, are being made that the manufacturers of equipment and supplies increase efficiencies of their products. The yellow flame carbon is an answer to these demands from the standpoint of a more efficient tool, but it is up to the cinematographer to see that the maximum of its energy reaches the motion picture film.

CIRCARAMA

(Continued from Page 456)

panels is scarcely noticeable to some, while to others it appears as a series of frisco posts or columns intersecting the view. The phenomenon of persistence of vision also enters into the illusion.

The camera and projection devices developed for Circarama represent the combined research work of technicians from the Disney Studios, Eastman Kodak Company, and the Rollei Company of Los Angeles. The final engineering was supervised by Roger Brugge and his assistant, Eustace Lyon of the Disney engineering department. The circular arrangement of the eleven Cine Special cameras may be seen in the accompanying photos.

Why eleven cameras, instead of six, seven or eight? Several factors determined this; the chief one was the manner in which the films were to be projected. Instead of arranging the projectors in a circle in the order of the auditorium, similar to the camera arrangement, they are set up behind the screen with the lenses pointing through the interstices between panels to the screen directly opposite. This arrangement required the use of an odd number of projectors. It was then found that using eleven projectors would reduce screen curvature to a minimum—essential to eliminate distortion.

Each camera is driven by its individual electric motor—a 24-volt war surplus aircraft actuator motor adapted for the purpose. Each motor is mounted below the camera base plate and is connected to the camera drive shaft through an arrangement of gears and shafts. Complete synchronization is maintained between the camera by an ingenious arrangement of sprockets and a chain linking all eleven motor drives. Starting and stopping the cameras is by remote control switch.

When shooting a subject or scene, all camera lenses are preset for uniform focus and exposure. Some photographers have suggested that the exposure setting for cameras shooting toward shade should be different than those on the cameras covering brighter areas. But

QUALITY IS OUR BUSINESS

For COMPLETE
FILM PROCESSING

in the EAST...

it's

MOVIELAB

Now
Celebrating
our 25th
ANNIVERSARY

ROUND THE CLOCK SERVICES

- Negative Developing
- First Print Department
- Ultra Violet and
- Flash Patch Printing

- 16 mm and 35 mm
- Excess Printing

- Title Department
- 45 Cutting and
- Editing Rooms



for color it's

MOVIELAB FILM LABORATORIES, INC.

619 West 54th Street, New York 19, N. Y. JUdson 6-0360



CINEKAD JUNIOR TRIPOD DOLLY

This collapsible three-wheel tripod dolly is especially designed to meet the demand for convenient mobility of cameras on low floor or in the studio.

Dolly can be used with any professional or semi-pro tripod.

The tripod is fastened firmly to the dolly by a clamp at each leg tip.

The special independent wheel locking system makes it possible to lock either two or three wheels in a parallel position, enabling the dolly to track in a straight line for rolling dolly shots.

Dolly folds quickly into a design compact, easy-to-store unit, 23 inches in length, weighing 14 lbs.

Write for Prices and Literature

CINEKAD

ENGINEERING COMPANY

300 WEST KING ST., NEW YORK 24, N.Y.

Phone F-3-835

DESIGNERS AND MANUFACTURERS OF
MOTION PICTURE AND TV EQUIPMENT

MOVIOLA

FILM EDITING

EQUIPMENT

14MM - 35MM

- PICTURE
SOUND
Plate and
Magnetic
- EDITING
MACHINE
- REWINDERS

One of the
new units 35
Machines for
picture and
sound.

Write for
Catalogue

MOVIOLA MANUFACTURING CO.

1421 Doheny St. • Hollywood 28, Calif.



WORLD FAMOUS



STANLEY ROBINSON
101 W. Highland St. Hollywood 28, Calif.

tests proved that uniform settings produce the uniform screen results necessary for segmented screen projection.

For production tests also disclosed that 15mm lenses were proper for shooting the area taken in by each of the eleven cameras, and at the same time give best results with the special lenses required for the projectors. The 15mm camera lens covers the field with a slight overlap, which is marked off in the projectors.

In the lower left hand photo (page 476) Lysett and his assistant are shown centering the cameras on the circular base plate. For this phase of the work, a circular target 150 feet in diameter was set up on the Disney lot in Burbank. The cameras were set up in the center, each focused on an respective area on the target, then locked in place. Each camera is mounted on a separate base plate which in turn is mounted on the circular plate, and provides micrometer adjustment of the camera left or right to simplify the centering procedure.

Centering each camera was done through the camera lens, using a ground glass and a magnifier. Because use of color film calls for filters over the lenses, special mull boxes had to be built and installed on each camera to keep the sun away from surfaces of the filters when shooting out of doors.

Although not intended for theatre use at this time, Grauman, clearly could be employed theatrically for super wide-screen productions in appropriately-constructed theatres.

END

NEWSREELS

(Continued from Page 476)

This is the timidity that is terrorizing into *major* months. A stifling, frustrating atmosphere. The public doesn't remember news that springs from restrictions—dull, factual news. It remembers color and spirit. Generation was built on the daring things. Stanley's trek to Africa in search of Livingston was the big story, not the final report. The way Floyd Gibbons covered a farm was how caught people's imagination and made them look for more. When an atmosphere of daring pervades a news shop it rubs on the man and gets into the story. That doesn't mean, to hell with the expense-account coverage that makes the audience cringe, but the public applauds and the club registers oops.

Newsreels need a face-lifting and injection of new drive. They need fresh window dressing in the form of new techniques and a renewal of every trick in the bag—competition, not cooperation with each other. Individual treat-

ment and coverage, not rote coverage. The sort of backing that makes a world personality welcome interviewee because he knows he is going to get a big deal, integrity in news reporting depends on such things, not short cuts or haste.

Sure, this treatment would cost money. But think of the impact of occasional "personas" shots such as the Kentucky Derby, a national flower show, a regatta, a big football game. Not in terms of cash, but prestige. TV does it when they sustain great shows, or present giveaway programs to hold a dealer's attention for one-half hour. The motion picture industry, with all of its fabulous assets and talents, can afford to do no less these days. The handicraft is bright and vivid on the face of millions of television tubes.

Finally, the newsreel business must begin to think in long range terms if it expects to attract new blood. The present atmosphere would scare away new talent. Electronics has only been scratched near-surface; and may well solve all problems. Even putting the industry on a happy, money-making basis.

Every big business from plastics to motor cars recognizes this policy of earmarking certain sums for research and constant improvement to hold patrons and keep their trade marks before the world. Newsreels trail-blazing sound-on-film and were the best advertisement any motion picture producer ever had.

Here is what is on the horizon. Two years will see a practical and economical system of recording and transmitting motion pictures on magnetic tape.

The best newsreel company to adopt this system will become the archal, largest leader in both theatre and TV fields. A money-making outfit guarantees to bring prestige to its sponsors.

Think of it. A newsreel, or newstage if you will, crew will cover a story on location, and transmit the sound and picture direct from source to key studios. There, the basic story will be re-recorded on a storage tape or processed immediately—just as directors and monitor men now do with live TV pickups. Experienced men will sit at master consoles and edit, add vault cuttings, proper music commentary (scripted from telephone information at the news site), even include pre-taped titles. Then, in turn, the finished clip will be re-transmitted direct to theatres and TV stations for immediate release or storage tapes until specific spots allow for release.

Ultimately, there will be a vast interflow of news picture material exchanged between network facilities, just as news copy is transmitted to newspapers via teleprinters. This is a whole new industry the great wire services may do well to investigate.

And it goes without saying that new-
reels will have to adopt the newer sound
recording techniques of tape and strip
film just as production has done. The
public isn't going to stand for the violent
contrast between Hi-Fi sound on fea-
tures, and standard recording.

Other new electronic padgim will be
used, just as some TV productions al-
ready are playing with the megat, wire-
less microphone. Its possibilities are
many in news work. A newscast control
man wearing one of these could pick up
the direct orders of fire marshals or
other leaders of rescue teams during
catastrophes. Football coaches listening
to their teams, jockeys tapping on their
micros. All the things operators have
not yet heard. Those "premium" touch-
screen point up stories.

Some smart outfit will start the ball
rolling use of these days. I hope it is
mine. One good beginning would be to
establish definite liaisons between film
producers and the electronic labora-
tories, so that both could know each
others' problems and ideas.

Let's not get sand bagged again, as we
were 25 years ago because apathy and
disregard those played ears when a
wireless sound transmission and a
projector clarified the end of an era.

Those of us who went everywhere and
looked everything to build up newsmen

CRAIG BIG SCREEN MOVIE VIEWER



- Large 13½ x 4¼ in. hooded screen
- Flat field projection lens and ground & polished condenser lens
- Rotating optical prism shutter
- Stainless steel film guide
- Left to right film travel
- Automatic lamp switch
- Built-in frame member
- Focusing and focusing adjustments
- 75 watt projection lamp

\$49.50 for 16 mm. or 8 mm. model

No need to darken the room when
you use this brilliant big screen
Craig Movie Viewer. Ideal for
viewing editing motion pictures
or TV films. Easily set up with
Craig or other standard rewinding
equipment. Craig complete
editing equipment is made in two
models:

CRAIG PROJECTOR-EDITOR—Portable
motion picture viewer and editing
outfit weighing 10½ pounds. Con-
sists of Craig Viewer illustrated

above, Take-up and Rewind Reel
Spindles, Craig Master Splicer,
Craig #7 Film Cement, and Carry-
ing Case, 16 mm. or 8 mm. model,
\$79.50 complete.

**CRAIG PROFESSIONAL EDITING
EQUIPMENT**—Consists of Craig
Viewer, Craig Master Rewinder
which accept 2000 foot reels, Craig
Master Splicer, hardwood mount-
ing board, and Craig Formula #7
Film Cement, 16 mm. model only,
\$79.50 complete.

Write for illustrated literature, KALART, PLAINVILLE, CONN. DEPT. AC-8

NOW! MOST ADVANCED REVERSAL ON MARKET FOR ONLY \$2495!



AMAZING NEW PERFORMANCE PROVED BY ACTUAL OPERA-
TION IN HUNDREDS OF CUSTOM FILMLINE INSTALLATIONS

- Processes reversal films at 500 ft. per hour
- Handles negative and positive film at speeds up to 1000 ft. per hour
- SIZE 76" x 48" x 24"
- WEIGHT 450 lbs. crated
- PRICE \$2495 F.O.B. Milford, Conn.

Accessories additional

WRITE TODAY FOR FULL DETAILS AND LITERATURE

One of 12 standard models from \$1095

Filmline

MODEL R15 REVERSAL FILM PROCESSOR
FOR TV, INDUSTRY, COLLEGES—OTHERS

NEW DESIGN CONCEPT! Units removable for cleaning.
Eliminates maintenance

NEW SIMPLICITY OF OPERATION!

NEW EXCLUSIVE OVERDRIVE! Eliminates film break-
age, slack buildup, automatically compensates for film
elongation.

NEW COMPLETE DAYLIGHT OPERATION! No dark-
room. Removable daylight magazine.

NEW QUALITY THROUGHOUT! Heavy gauge stainless
steel tanks. Filtered air intake.

Filmline leads the field in engineering and manufacturing standard and cus-
tom film 16, 35, 70mm & 8 mm color film processing machines of all types.

Filmline

corp. Dept. C, Milford, Conn.

BIG SAVINGS



Factory Re-built HOUSTON K-1A FILM PROCESSORS

Chance of a lifetime to buy one of these top quality Houston processors at far below cost. Completely software tested. Daylight operation. Automatically processes Kodak black and white reversal motion picture film. Easy to operate. Produces fine results. Factory rebuilt and guaranteed by the original manufacturer. Also suitable "as is". Limited supply. Write for catalog and price index.

HOUSTON FEARLESS

See Color Corp. of America
11800 W. Olympic Blvd.,
Los Angeles 34, Calif.



PELLEGRINI

VARIABLE SHUTTER UNITS
FOR THE BOLEX H-8
AND H-16

The best on
your 8mm
and 16mm
BOLEX Super shutter speeds
and easy color changing.
Prices for both are \$8 per set in
within U.S. \$10 per set. Contains
with complete frame counter
\$100.00. Tax extra. One year
guarantee and money back
guarantee both included. Send
for free information booklet.
Price subject to change
without notice.
19610 PELLEGRIINI
1544 Lombard St.
San Francisco 33, California



MOVIE EQUIPMENT NEEDED to photograph patients at 'Veterans' and Army Hospitals

Any type film can be used under equipment needed
for film distribution purposes.
All equipment recommended, all are tax deductible.
Send for

HOUSTON PICTURE DRIVE—Real 8mm
136 Boulevard Drive, East
San Antonio 9, Texas

Scheibe FILTERS

In World Wide Use

Produce moonlight and night effects
in daytime—top action—redwood leaves
and many other effects.
Infrared and color

REINOLD FILTERS COMPANY
Bismarck 20, N.D. 58101
P.O. Box 44574, Hollywood 44, Calif.

prestige willingly gave of all our talents and time to make a dream come true. Those who handle the purse strings, hold the ultimate fate of a great industry in their hands. We are ready, willing, and able. And are waiting for some daring

guy to come along and slash the ropes. The whole reversal business needs a renewal of faith and the same sort of vision and guts it asked of every man who ever covered a story.
Anyone for competition?

SHOOTING THE ENTIRE PICTURE ON LOCATION

(Continued from Page 41)

ers, who will be moving farther and farther from studio work as they progress.

The fact was the chief problem for cinematographer Clive, but it wasn't the only one. Rural electrification lines running through the Oregon forests are of aluminum color, and, unless painted over with black paint, can be seen for miles. When it is understood that these lines carry 69,000 volts, it can be seen what a problem even this small firm presented. Men were hired from the electric companies to come out with glass ladders and insulated "shotgun" poles to do the painting. In the end more than five miles of these wires had to be painted to make them invisible to Clive's cameras.

River crossings over fords in the rubber Deschutes and Crooked Rivers with sometimes more than 25 Camerapax wagons had to be solved cinematographically. And shots which were to include foaming Benham Falls as background finally accomplished blasting a log jam

out of the river with dynamite if the proper effect was to be gained. Dr. Toth, without hesitation, had men float boxes of dynamite down into the jam and blew it out of the water.

The director also asked Clive for, and got, 800-degree shots of settlers on their way across the frozen mountains, of square dances in the fort, and of campfires along the route. Whenever a shot wasn't feasible without a script change, the script was changed. Often older ways of doing things were discarded in the face of necessity to get the job done under existing conditions. Studio means and methods simply didn't exist here.

One of the most difficult shots of all required Clive and his crew to lower cameras, lights, and reflectors over a sheer wall of rock to photograph Douglas and his leading lady, Elva Matternick, swimming the 36-degree Deschutes river. These takes only were allowed and then the actors, blue with the cold, were pulled out of the water and rushed to

Kodak Announces Tri-X 16mm Reversal

THE AVAILABILITY of the high-speed Kodak Tri-X emulsion on 16mm reversal film has been announced by the Eastman Kodak Company.

As a 16mm reversal film the Kodak Tri-X is expected to find immediate acceptance by commercial, television, industrial and sports cinematographers because of its increased speed and sensitivity which have been achieved with no corresponding increase in graininess.

The new film will be known as Cine-Kodak Tri-X C.P. Reversal Film. Processing will be done by the purchaser or through independent 16mm processing laboratories. With only minor sacrifices in speed and graininess, the film may also be used to yield negative images.

The daylight exposure index of the Tri-X Reversal Film is 250, tungsten index 160, making it particularly suitable wherever adverse lighting conditions may be encountered. It will withstand somewhat higher processing temperatures than Kodak Super-XX C.P. Reversal Film, and possesses sufficient exposure

and development latitude to permit its use at speeds higher than its normally rated speed under some circumstances. The film provides improved total reproduction with ample detail in both highlights and shadow areas.

Although the film is extremely sensitive to light, it can be used in a camera with fixed shutter speeds for bright sunlight scenes by placing a filter over the camera lens. A Kodak ND-3 Filter, cutting down brightness by three stops, can be used for this purpose. As an alternate, the Kodak Wratten X2 Filter which results in little change in the monochromatic rendering of colored subjects, can be used.

Cine-Kodak Tri-X C.P. Reversal Film is available in 100- and 200-foot spools, and in 400-foot rolls for darkness loading, either double perforated or perforated one side. It is also supplied on special order spooled for the Kodak High Speed Camera or 16mm Panaflex Camera. Price of the 100-foot roll on camera spool, without processing, is \$4.35.

Film Editing Made Easy
with NEW
**professional
film viewer**
for 35mm film

Every film editor will appreciate a viewer that enables him to view his film from left to right—on a large, brilliantly illuminated screen.

The PROFESSIONAL FILM VIEWER makes film editing a breeze. Easy threading, portable, will not scratch film. Put this viewer between your reminders and speed up your editing. Size of Viewing Screen 5 1/2 x 4 1/4.



35mm Model \$375

FRANK J. TUTTLE
CAMERA EQUIPMENT ©
1800 BROADWAY NEW YORK CITY

Write Dept. A-84

warm blankets, towels and a fire.

The feeling of all concerned with the making of "The Indian Fighter" is that it will be one of the most unusual pictures of the year. It will have pioneered picture photography under some of the most trying conditions experienced this year by Hollywood's independent companies, seeking new and better ways to make pictures that will compare favorably with the best the big studios have ever turned out.

MOVING?

When changing your address, please notify us at least four weeks in advance. BE SURE to give your former address as well as your new address. Our Circulation Department needs both addresses in order to properly identify your address itself.

Your cooperation will insure that American Cinematographer will continue coming to you regularly without delay or omission of course. Thank You.

—American Cinematographer

Charles Ross INC.

EVERYTHING FOR
EASTERN PRODUCTION

- LIGHTING -
GRIP EQUIPMENT
PROPS - GENERATORS
DOLBES—MICROPHONE—LOOMS

(Catalogs Upon Request)

333 WEST 52nd ST.

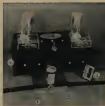


N.Y. 19, N.Y. 21 4-8670

GONE FOREVER!

The Dunning Magic Dot Light Change Unit Consists Of:

- 1 Anson-made metallic pressure adhesive tape with high-conductive qualities
- 2 A special punch for cutting and affixing the Magic Dots to edge of film.



SID SOLOW, Vice-president, and ED REICHARD, Chief Engineer of Consolidated Film Industries, Hollywood, report: "On a running-loop test, an equivalent of over 50,000 light changes were made without a single miss, with the

NO MORE NEGATIVE NOTCHING

... for light change
and fader printing.

- 3 A light change and fader controller that instantly replaces a roller on Model J or D printers
- 4 An electrical remote positioned impulse control box having no vacuum tubes or temperamental adjustments that styms most electronic systems

DUNNING MAGIC DOT LIGHT CHANGE UNIT

ANSON RESEARCH CO., 4337 CLYBOURNE • NORTH HOLLYWOOD • CALIF.

RANGE FINDER

(Continued from Page 485)

For spectacle wearers, this is of particular importance, because they often fail to manage the usual built-in range finder. Without any difficulty the spectacle wearer can now focus his camera accurately.

"When we designed the lens system of the 'Fococent,' said a company representative, "we naturally strove for the best obtainable optical correction and we have achieved it. The correction goes so far that in the case of some very fast three element anastigmats the remaining defects of spherical aberration and astigmatism are practically eliminated. The efficiency of highly corrected four- and five-element anastigmats remains practically unaffected."

Since the "Fococent" constitutes an optical system without a focal length of its own, it naturally affects neither the scale of reproduction nor the depth of field and time of exposure.

At the time of going to press, the Editors of American Cinematographer had not been informed of the appointment of a distributor for the "Fococent" in the U. S. However, an announcement of this sort will probably follow shortly. As to price, we are informed that the "Fococent" sells in England for approximately \$20.00.

Model 35-16C

SENSITESTER

* IMMEDIATE DELIVERY

to the lab owners interested in—

QUALITY EFFICIENCY ECONOMY

- * DUAL MACHINES
1—Sensitometer
2—Scene Tester
- * HIGHLY ACCURATE
Electrically timer unaffected by climate changes.
- * NEW TYPE LONG-LIFE
Cold Light Exposure Unit
- * WITHOUT ADDITIONAL
EXPENSE will work any printer

Combination 35mm-16mm

ART REEVES MOTION PICTURE EQUIP.

7512 Santa Monica Blvd.

Hollywood 46

California



Convert Your Auricon Pro or Cine-Voice to Accept 400-ft Magazines



A completely new
feature Auricon cam-
eras is the 100'
series, 35mm, 35mm,
or 400' magazine
for most recording
all 16mm sound
cameras. Your cam-
era is already in
line, installed and
operational as we
can supply
complete new units
on order.

Insert down the top or speed
up of film. Complete
units for 16mm, 35mm, 35mm,
or 400' magazine
for most recording
all 16mm sound
cameras. Your cam-
era is already in
line, installed and
operational as we
can supply
complete new units
on order.

Write for literature
and prices

We are also
distributors for
BELL & HOWELL
Lenses, Projectors

HAROLD'S Photography & TV
320 South Michigan, Room 201, S. 2

Automatic Daylight Processing



DEVELOPING TANK
• Processes up to 100 ft
• from 135 film
• 35mm-16mm-8mm
• Water-tight design
• Tough plastic body
• Service already assured
• Your tank also available



FILM CISTER
• Water-tight design
• Service assured
• 35mm-16mm-8mm
• Tough plastic body
• Service already assured
• Your tank also available

Quoted Write for Free Literature
Micro Record Corp.
Dept. AE
147 South Ave.
Beverly, N. J.

Video Film Laboratories
131 West 23rd Street
New York 11, N.Y.

Complete 16mm laboratory service for
Producers using the Reversal Process

Also 16mm Negative and Positive
developing

WRITE FOR PRICE LIST
Established 1949

SAY SOMETHING EXTRA WITH SOUND

(Continued from Page 471)

This is an instance where the commentary definitely adds to the film. Neither picture nor sound-track would be complete without the other. Now, if the commentator began, "This church is shaped like a footstool, with a tower at each corner representing a leg of the stool. The reason for this is etc.," he would be wasting breath on something which the audience could see for themselves as quickly as the picture unfolded on the screen.

This is deliberately a very simple example (though it is always worth testing the value of a commentary of a holiday or documentary production by seeing just how much of what is to be said can already be seen on the screen). Nevertheless, it does point the way to the use of the extrapictorial sound technique in more ambitious spheres.

Suppose, for instance, that you have a straightforward dialogue sequence to shoot. The orthodox treatment would be to cut from one person to the other as they speak. But this adds little to the conversation but the facial expressions of the speakers. True, these can sometimes be important; but in many cases the reaction of the listener is more vital than the words of the speaker.

If your picture shows the listener while your track carries the other's words, the total effect will be subtler and stronger than if the image and sound were identical. (This is also an example of making a virtue of the problems of exact lip-synchronization). I don't suggest it would be wise to use this technique for the whole sequence, for merely cutting from listener to listener would prove tiresome, and eventually pointless. But it can be used for, say, a dramatic and fairly lengthy speech which, to the listener, is a revelation of some unsuspected fact or situation.

Similarly, it might be an idea—according to your script and your cast's ability—to try a short dialogue with the camera solely on the person who does the least talking. With well thought-out dialogue, a strong situation and an adequate actor there is no reason why you should not create a complete characterization in a single shot.

Commentary is frequently even more effective in a fiction film than in a documentary. One of the best examples I remember in the professional cinema occurred in Cukor's brilliant story of a broken marriage, *The Marrying Kind*. At the beginning of the film Aldo Ray and Judy Holliday describe to a divorce court judge how they first met. The picture flashes back to show how it all be-

gan; the voices continue, not only to introduce the scene, but to describe the action throughout.

This may sound like a complete contradiction of everything I've been putting forward so far. But the point is this: Ray's version and Judy Holliday's injured interruptions disagree on what happened, but the picture shows exactly what took place, and proves that they're each trying to tell the story to show themselves in the best possible light. Thus we have three versions of one incident on the screen and track at the same time, not merely telling the story and making for fast-rate comedy, but also helping towards the characterization of the two principals.

There is tremendous scope for development here, and in a way which seems almost tailored for the amateur. The reminiscences of a "hero," fishermen's tales, the claims of inhabitants of rival towns—these are the most obvious examples of the scores of film story ideas that could be devastatingly illustrated by images showing what actually happened.

Sound is an expensive item for any amateur, so expensive, in fact, that it seems foolish not to make the most of it. Why not ask yourself, before you begin your next sound production, whether your sound-track is really going to add anything to the film? If it's not, then it's obviously a waste of time and money having a track at all, but that needn't mean scrapping the whole idea of the film. As I said before, there's still an awful lot of scope in the silent cinema.

SET LIGHTING

(Continued from Page 468)

additional units to polish the closeup. The most important of these is the top-light or back-light, usually mounted above and behind the subject to throw a light on subject's hair and shoulders. Aside from the added artistic touch, the main function of the back-light is to give the subject "separation", that is, to keep him from blending into the set and make him stand out. For the back-light, a fairly intense unit, often equalling the key-light in degree of illumination, is invariably used.

Some cameramen may or may not want to use a kicker light—which is nothing more than a small spotlight used to illuminate a particular facial feature, piece of jewelry worn by the subject, etc. An eye-light placed to one side of the camera and at the subject's eye level,

Look for
this
trademark



It is your guarantee
of the finest in sound
editing instruments.

PRECISION SOUND READERS

READERS: Sample Reading polished stainless
drum with needle bearings with a surface which
cannot damage film. film rollers polished to con-
form with SAMTE standards, and equipped with sapphire
bearings. precision ground shafts dimension
drawn 7/8 inches

AMPLIFIER: 117 volt—60 cycle—AC power
output—4 watts heavy duty Alaska V speaker
safely fused professional socket polar
light 5 ft heavy duty cord

All Prices F. O. B. Factory, Brooklyn, New York



OPTICAL-MAGNETIC
Model 800 14mm, 35mm & 1/2 inch
NET PRICE \$239.50



OPTICAL
Model 600 14mm and 35mm
NET PRICE \$185.00

MAGNETIC
Model 700 14mm, 17.5mm, 35mm
and 1/2 inch
NET PRICE \$198.00



Write for Literature

PRECISION

1129 Union Avenue

LABORATORIES

Brooklyn 3, New York

will add an extra measure of sparkle to
the scene.

The light falling on the subject can
be carefully controlled by means of
barn doors, snoots or diffusers mounted
on the spotlights. If the light still hits
part of the subject that the cinematist
wants to subdue, this may be corrected
by screening the light off with a gobo, a
rectangular sheet of black board or wire
mesh, set up between the light source
and the subject.

Generally speaking, women subjects
look better in closeup of diffused light is
used in photographing them. Gobo or
light silk screens placed over the spot-
lights will soften harsh shadows and cre-
ate a pleasant modeling light. Women
with wrinkles or "crow's feet" usually
require a more or less flat lighting to
avoid accentuating such features. Where
further correction is needed, it is a good
idea to purposely over-expose the scene
(in order to "wash out" the wrinkles)
and then correct the over-exposure in
printing.

In lighting men, the aim of the pho-
tographer usually is to make them ap-
pear as masculine as possible. For this
reason, it is better to use light without
diffusers. Also, less fill-light should be
used so that the character lines and the
structure of the face will have more

(Continued on Page 485)

COMPLETE MOTION PICTURE EQUIPMENT

RENTALS

FROM ONE SOURCE

CAMERAS

MITCHELL
14mm
35mm Standard
35mm Hi-Speed
35mm MC + 35mm MFC
BELL & HOWELL
Standard + Hypan + Idea
ARRIFLEX
14mm + 35mm
WALL
35mm single system
ECLAIR CAMERETTE
35mm + 16/35mm
Combination
AURICON
all models single system
One-Eyed Speed
Alucor + Reflex
Rings + Trips
DOLBY
Farran Pericon
Cometrol (CRAE)
Phicon + Western
2 Wheel Pericon

LIGHTING

Male Richardson
Bonwell MacLuster
Celamoon
Century
Cobra
Spider Beams
Roll Switches
Strong ARC Projector
10 Amps 112V AC 2000W-
2000W 250W
CICCO Cine Lite
(fluorescent line)
Gator Clip Lites
Barn Doors
Di-Rays
Dimmers
Reflectors

EDITING

Mentzer + Reubens
Tobias + Selzers
Viewers (VOCOD)
GRIP EQUIPMENT
Parade + Ladders
2 Steps + Apple Boxes
Stands + Steps
Globe Stands
Complete grip equipment
SOUND EQUIPMENT
Magneto-magnetic film
Reams Magiscorder
Male Richardson Reams and
Paradelectors
Portable Mix Reams
Portable Power Supplies in
appliance cases and recorder

WE SHIP VIA AIR, RAIL OR TRUCK

LEASING DIVISION
CAMERA EQUIPMENT

Dept. A-3-19 • 1660 Broadway • New York City

HOLLYWOOD STUDIO PRODUCTION

Persons and studios the producers for which members of the American Society of Cinematographers were assigned as Directors of Photography during the past month

AMERICAN SOCIETY OF CINEMATOGRAPHERS

ARTHUR MALKIN, President
SOL MALKIN, First Vice-President
WILLIAM SCALL, Second Vice-President
ALFRED COLES, Third Vice-President
WALTER SYBING, Treasurer
CHARLES C. CLARKE, Secretary
ROBERT DE GRASSE, Secretary At-Large

BOARD OF GOVERNORS

JOSEPH BRON
GEORGE POLLEY
BURNETT GUFFY
WALTER HEDGE
HUE MORGAN
RAY KATZMAN
LEON SHAPIROFF
PHILIP TANNENBAUM

ALTERNATE BOARD MEMBERS

ELIAS LANTIER
PAUL EAGLER
PATRICK ENDREKE
IRVING GARDNER
WALTER KRAMER
EDWARD LAGGIO
ROBERT POTTSACK
JOHN SEITE
JAMES VAN TRIGG
PAUL VOGEL

ASSISTED ARTISTS

- **HARRY NEWMAN**, "Olympia Forever," with Lee Correy, Banta Hall, Mary Beth Hughes, Edward Bernds, director.
- **JOSEPH W. FRANKEL**, "World Without End" (Color), with Hugh Marlowe, Nancy Cord, Edward Bernds, director.
- **FLOYD CRANE**, "Shack Up on 31," with Tracy Morris, Frank Leavy, Lee Marvin, Edward Dean, director.

COLUMBIA

- **JAMES WYNN HEINT**, "Punch" (Technicolor, CinemaScope), with William Holden, Ronald Russell, Kim Novak, Josh Logan, director.
- **BURNETT GUFFY**, "Bubble Squeeze," with John Lund, William Bend Sin, director.
- **HENRY FILLICHER**, "The Showgirl Story," with Gene Barry, Barbara Hale, William Cagney, director.
- **RAY JUNE**, "Tomb Raider" (Welch Productions, CinemaScope), with Jane Russell, Conrad White, Nicholas Ray, director.
- **CHARLES LAWTON**, "Jailbait" (Technicolor, CinemaScope), with Gloria Ford, Ernest Borgnine, Valerie French, Delores Davis, director.

METRO-GOLDWYN-MAYER

- **JOSEPH RUTENFRAU**, "Diamond" (Eastman Color, CinemaScope), with Howard Keel, Ann Blythe, Dolores Gray, Vincente Minnelli, director.

- **ARTHUR ARNO**, "The Coy Tender" (Wide-screen) with Susan Hayward, Richard Cohn, Eddie Albert, Daniel Mann, director.
- **PAUL VOGEL**, "The Tender Trap" (Eastman Color, CinemaScope) with Frank Sinatra, Debbie Reynolds, David Wayne, Celeste Holm, Charles Walters, director.
- **ROBERT FLANCK**, "Dance" (Eastman Color, CinemaScope) with Lina Turner, Peter Alexander, Maria Faren, Robert Morse, David Miller, director.
- **RENNAL HANLEY**, "The Last Hand" (Eastman Color, CinemaScope) with Robert Taylor, Stewart Granger, Glynis Noel, Anne Bancroft, Richard Brooks, director.

PARAMOUNT

- **LEONID GILGIS**, "Wallace Kelly" (Pyramidal, Marlin), "The Ten Commandments" (VistaVision, Technicolor), with Charlton Heston, Anne Baxter, Yul Brynner, et al. Cecil B. De Mille, director.
- **LEONID LONDON**, "You Can't Lose" (VistaVision) with Carol O'Connor, Tom Tryon, Jack Lavender, Michael Curtis, director.
- **LEONID LONDON**, "The Man Who Knew Too Much" (VistaVision, Technicolor), with James Stewart, Dorey Day, Allied Rich, director.
- **DANIEL FARR**, "The Lady Eve" (Technicolor, VistaVision), with George Gobel, Vitti Gabor, Norman Taurog, director.

RKO-RADIO

- **WILLIAM CLEGG**, "Clory" (David Butler Prod., Technicolor, Superscope), with Margaret O'Brien, Charlotte Greenwood, Arthur Houslay, et al. David Butler, producer-director.

THWENTY CENTURY-FOX

- **MILTON KRASNIK**, "The Cat in the Hat" (VistaVision, CinemaScope, Color), with Ray Milland, Joan Collins, Farley Granger, Richard Fleischer, director.
- **JOSEPH MACDONALD**, "The View From Pompey's Head" (CinemaScope, Color), with Richard Egan, Dana Wynter, Cameron Mitchell, Philip Dunne, director.
- **LEON SHAPIROFF**, "Good Morning, New York" (Color, CinemaScope), with Jennifer Jones, Robert Stack, Robert Koster, director.

UNIVERSAL INTERNATIONAL

- **WILLIAM BRUNNEN**, "Ten Tennyson" (Avery AE Prod.) (Technicolor, VistaVision), with Jeff Chandler, George Nader, Julie Adams, Joseph Pevney, director.
- **MICHAEL CURTIZ**, "World in My Corner" (with Audie Murphy, Barbara Rush, Jeff Marshall, Anne Helm, director).
- **IRVING CLARKSON**, "Backlash" (Technicolor) with Richard Widmark, Dorcas Kern, Rudy Murk, director.
- **GEORGE ROBINSON**, "The Square Jungle" (with Tony Curtis, Pat Crowley, Ernest Borgnine, Paul Kelly, Jerry Hopper, director).
- **WILLIAM DENNIS**, "The Benny Goodman Story" (Technicolor), with Steve Allen, Dorcas Kern, Boris Gerson, Harry James, Valentine Davies, director.
- **WILLIAM SYBING**, "Dance at Bregenz" (Technicolor), with Romy Calahan, Martha Hyer, Donis Jagger, Jack Arnold, director.

• **LEONID LAGGIO**, "A Girl in the Rain" (Wide-screen) with Lita Stokkery, Jack Manning, Richard Jones, director.

WARNER BROTHERS

- **ROBERT MITCHELL**, "Miracle in the Rain," with Jack Warner, Van Johnson, Paul Peters, Barbara Nichols, Rudy May, director.
- **WILLIAM MILLER**, "Guns" (Wide-screen) with Elizabeth Taylor, Rock Hudson, Janet Driscoll, Jane Witham, George Stevens, director.
- **SAM LEVINTH**, "The Court-Martial of Billy Mitchell" (Wanamaker, CinemaScope), with Gary Cooper, Ralph Bellamy, Fred Clark, Robert Hayes, Otto Preminger, director.
- **JOSEPH LESTER**, "Our Man Brooks" (with Eric Ayles, Robert Buckwell, Jane Morgan, Gale Gordon, Al Lewis, director).

INDEPENDENT

- **HARRY STRANDLON**, "Guns and Dolls" (Samuel Goldwyn Prod., Technicolor, CinemaScope) with Marlon Brando, Jack Palance, Frank Sinatra, Virginia Henner, et al. Joe L. Mankiewicz, director.
- **EDWARD LAGGIO**, "Now Is Made of Night" (Friedrich Prod., with Dean Andrews, Ike Lapine, Rhonda Fleming, George Sanders, Thomas Mitchell, Howard Duff, Fritz Lang, director).
- **LEONID RALLAND**, "A Kiss Before Dying" (Crown Prod., Eastman Color, CinemaScope), with Robert Wagner, Jeff Hunter, Virginia Lusk, Gerd Oswald, director.
- **WILLIAM ROSE**, "Al Glick" (The Searchers), C. W. Whitney Prod., (Color, VistaVision), with John Wayne, Jeff Hunter, Vera Miles, Ward Bond, John Ford, director.
- **HAROLD LIPKIN**, "Forever Darling" (Gloria Prod., EastmanColor, Wide-screen), with Lucille Ball, Don Ameis, James Mason, Leonid Calvert, Alexander Hall, director.
- **SEAN KAPLAN**, "Papillon" (Wanamaker, color, Prods.), (Shooting in N.Y.), with Van Heflin, Suzanne Straight, Fiedler Cook, director.
- **GUY ROY**, "See You Lady" (Lowe & Bartlett Prod.), with Peggy Carson, William Talman, Marie Windsor, Richard Barlow, director.

TELEVISION

- **KENNETH PERLIN**, "The Bishop's Secret Journey" (Seven Dances, Western Marshall), "Fury" (Longshots).
- **ROBERT DEGRASSE**, "Those Winning Girls" (Make Room for Daddy), "It's Always Jan" (Nex Video, "The Lesson").
- **WALTER STRONG**, "This is the Life" (Randy Miller, "Cassanova").
- **MARK STEINBERG**, "The Ray Hatten Show," "It's Fun to Be Funny" (Schlitz Playhouse of Stars).
- **GEORGE F. CRIVELLO**, "Solitaire Playhouse of Stars".
- **SHIRLEY SHARP**, "Shirley, Queen of the Jungle", "Fury" (Longshots).
- **BO FITZGERALD**, "You Are There".
- **LEONARD WOLFE**, "The Great Oldsworlder".
- **LEONARD WOLFE**, "The Life of Riley".
- **GO WARRINGTON**, "Sp. Prison of the Yakuza".
- **JOSEPH LACHELLE**, "My Friend Flicka".
- **CARL GUSTAF**, "Overman", "King's Row", "Harold Stine", "Cassanova".
- **STUART TUCKERSON**, "Lones".
- **LEONID LAGGIO**, "My Friend Flicka", "G.E. 25th Century Fox Show".
- **NEWMAN DEGRASSE**, "The Lonnie Young Show".
- **JOSEPH BRON**, "My Friend Flicka", "The Earth The Land".
- **ALAN GREENGLASS**, "Andy's Gang".

KEY LIGHTING

(Continued from Page 403)

depth and stand out more clearly. With men subjects, also, the key-light may be placed higher and at a more extreme angle to the side of the camera.

Sequences lacking special effects in the long shots should carry out those same effects in the corresponding close-ups. If there is a highlight sequence, for example, the closeups should show the flicker of light on the subject's face. This is done by moving a small branch or twig in front of the light source straight along the line. Cross-lighting, in which the key-light is set to one side of the subject with little or no fill-light used, is very effective in dramatic sequences. Film lighting is a very extreme adaptation of this technique and is executed by placing a light directly behind the subject so that he screws it, his form being outlined with light with his face going dark. This particular effect must be perfectly executed and is not recommended except in very dramatic sequences.

In lighting players on the set, the threefold objective is to have them adequately lighted for the action, to light them in key with the mood of the sequence, and to make them look good on the screen. If the filmman comprehends his lighting problem with these points in mind, his camera results should compare favorably with those characteristic of the professional photographer.

MOVIES IN LAW ENFORCEMENT

(Continued from Page 401)

tions last January for their own information, experiments are continuing before a printer of such films are made in court.

Most graphic driver tests, as far as the movies are concerned, are revealed when the driver is asked to perform these standard checks: A. Show balance with head back, eyes closed, arms outstretched. B. With eyes closed, arms outstretched, bring finger to nose. C. Pick up coin. D. Walking and turning at command.

So encouraging have been the results with the new high-speed motion picture films, that Sheriff Ed Elser has had the department's 16mm camera pressed into use to record gang fights, fatal accident scenes, scenes of violence, reckless driving, and for refreshing memory of testifying officers.

"Night motion pictures can be invaluable for preserving a record of the

(Continued on Page 405)

Produce startling animation results
in record time with

OXBERRY ANIMATION EQUIPMENT

OXBERRY STAND • COMPOUND

Developed to meet the exacting requirements of the animation industry. Saves hours of labor. Provides complete flexibility and maximum accuracy. Compactly and ruggedly constructed. Automatically coordinates film, camera and platen.



MODEL ILLUSTRATED
Rough 11' x 10' x 10' x 10'

OXBERRY OPTICAL STEP PRINTER

Designed for special effects and projection printing. Produces blow-up reproductions, step printing, push-ups and traveling mattes. Units are equipped with 35 MM or 16 MM head. Printers to handle TSOO A-O VEEA VISION and other processes require special units. Standard models are available in 35 days.



New

OXBERRY COMBINATION 35-16 MM PROCESS CAMERA

Especially engineered for animation study and optical printing. New in production, early delivery.

Write for specification sheet.

Each OXBERRY unit is created by an organization experienced in animation problems and devoted exclusively to the production of superior equipment. Also available are registration devices, page and punchers, cost accounting drawing and planning boards.

Write today for complete brochure...

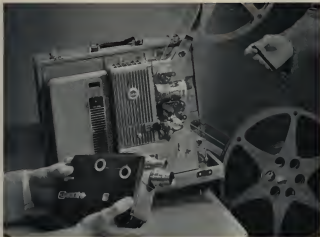
The ANIMATION EQUIPMENT Corporation 38 Madison St., Dept. A.C.E.
New Rochelle, New York

**BACK
ISSUES
30¢**

Complete your files of American Cinematographer with issues you have missed or lost. Valuable technical data in every issue for future reference for both amateur and professional cinematographers.

AMERICAN CINEMATOGRAPHER

1789 No. Orange St., Hollywood 28, Calif.



"Good show!"

Coming from a fellow professional, those are mighty important words to any cinematographer. And important aids in making that "good show" are a movie camera that's handy wherever you go, yet has the features you need for theater-quality productions... and a projector that's a real professional partner.

Cine-Kodak K-100 Camera

The exciting new 16mm K-100 Camera combines unusual movie-making ability with a price well below that of other fine cameras. Want extra-long scenes? A 40-foot pull is provided with one winding of its spring motor. For special effects you can adapt the K-100 to hand-cranking, permitting back-winding for fades and dissolves. You can equip it for electric drive. Shoot single frames, too... or any speed from 16 to 64 frames per second. It has telescopic finders. Takes 100-foot rolls of single- or double-perforated film. The lenses? They're Kodak Ektar—and optical engineers have produced no finer!

PRICES: The Cine-Kodak K-100 Camera, with Kodak Cine Ektar W 25mm f/1.9 Lens, \$369; with Ektar f/1.4 Lens, \$399. The Kodascope Pagant Sound Projector, Model 76C, with f/1.6 lens, 750-watt lamp, and 1800-foot reel, \$425. Optional lamps and lenses available (Kodascope Reel Projector, Pagant-styled for superb 16mm, silent shows—\$246). Prices include Federal Tax where applicable and are subject to change without notice. Ask your Kodak dealer about small down payments and easy terms.

Kodascope Pagant Sound (and silent) Projector

The Kodascope Pagant Sound Projector delivers sharper detail—from the core to the corners of your screen. You can enjoy quiet operation and long projector life without oiling—another Pagant Sound Projector exclusive! Turn your silent movies into sound presentations by simply plugging in a mike for personal narration. Add extra dramatization through a phono adapter and musical background. Or enjoy readily rented 16mm, Hollywood sound productions. The Pagant's unique Fidelity Control enables you to focus the scanning beam to get the most from any optical sound track.

Kodak
KODAK SAFETY FILM

EASTMAN KODAK COMPANY • Rochester 4, N. Y.

color harmony every time



color-correct* prints

You'll also
have **production harmony**
every time you schedule
these Byron 16mm facilities:

script
art
titling
animation
editing
sound effects
recording
location photography
music library
sound stage
complete black-and-white
laboratory facilities
precision magnetic striping

Quality conscious? Byron color-correct* prints are
what you want. Get duplicate prints processed
with exacting fidelity — color prints in balance that
retain all their natural beauty with full depth and
clarity. Color-correct* is a Byron exclusive, the result
of many years of engineering research and development
by a pioneer laboratory — staffed by master craftsmen
— working with the finest equipment at top level
efficiency. Choose the leader in the 16mm color field.
Time important? Try our 5-hour service.

byron

Studios and Laboratory

1224 Wisconsin Avenue, N.W., Washington 7, D.C. DUpost 7-2860

*Reg. U.S. Patent Office

PRACTICALLY EVERY 16MM FILM PRODUCER IN THE WESTERN HEMISPHERE IS A CLIENT OF BYRON